

**Petition for Reconsideration  
to STB**

**Exhibit 6**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA**

CSX TRANSPORTATION, INC.,

Plaintiff,

v.

ANTHONY A. WILLIAMS *et al.*,

Defendants

SIERRA CLUB

Defendant-Intervenor.

Civil Action No. 1:05CV00338 (EGS)

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**DECLARATION OF FRED MILLAR**

I, Fred Millar, do hereby declare:

1. The following is based on my personal knowledge.
2. I am a specialist and policy consultant in the areas of homeland security, hazardous materials transportation, and chemical accident prevention.
3. I have worked on and researched chemical safety regulation and prevention of chemical hazards since 1979.
4. I have advised members of the United States Senate and Senate staff regarding proposed chemical accident prevention laws and have drafted or participated in revising sections of the 1990 Clear Air Act Amendments, including provisions mandating studies of catastrophic potentials of U.S. hydrogen fluoride facilities and an EPA program

of annual full-scale field testing at the Liquefied Gaseous Fuels Spill Test Facility of dense vapor cloud chemicals widely used in the industry.

5. I also initiated and supported certain provisions of the Clean Air Act Amendments of 1990 relating to chemical accident prevention, under which thousands of chemical facilities have produced comprehensive Risk Management Plans including worst-case release scenarios.

6. I was for 5 years (from 1989 to 1994) the Toxics Director at a non-profit environmental organization, Friends of the Earth.

7. Before that time, I served for 9 years (from 1979 to 1988) as the Director of the Nuclear and Hazardous Materials Transportation Project at the Environmental Policy Institute.

8. From 1994-2004 I served as an independent consultant on nuclear waste and chemical accident prevention policies. My clients included Public Technology Inc., Oil Chemical and Atomic Workers International Union, United Steelworkers of America, International Chemical Workers Union, Operating Engineers International Union, Friends of the Earth/England and Wales, National Environmental Law Center, Environmental Working Group, Labor Ministry of Brazil, Greenpeace International, and Friends of the Earth US.

9. For 15 years I have served on the District of Columbia Local Emergency Planning Committee.

10. I have testified on the risks of terrorist attacks involving hazardous chemicals before the DC Council and have made invited presentations on these risks to the Transportation Security Administration/US Department of Homeland Security,

Fairfax County VA and Montgomery County MD Local Emergency Planning Committees and the Metropolitan Washington Council of Governments Emergency Response Planners Committee.

**The Substantial Danger of a Terrorist Attack  
on Ultrahazardous Material Rail Shipments**

11. The rupture of a 90-ton rail car containing chlorine, or another one of the ultrahazardous materials regulated by the DC Terrorism Prevention Act, would likely cause tremendous death and devastation if such a rupture occurred in a densely-populated urban area like the area covered by (and immediately surrounding) the Act's Capitol Exclusion Zone.

12. The tragic accident that occurred in Bhopal, India in 1984 provides an illustration of the effect such a catastrophe could have: in that incident, which involved a leak of materials from a 42 ton-container of methyl isocyanate, an estimated 3,000 to 6000 people were killed and 100,000 were injured in one night.

13. Some of the ultra hazardous materials regulated by the DC Terrorism Prevention Act, now routinely transported by rail carriers through the District, are as lethal as the methyl isocyanate involved in the Bhopal disaster, and could be released more quickly and in substantially greater quantities in the event of a terrorist attack.

14. CSXT takes the position that protection of the Capitol building is solely a federal concern. However, the devastating effects of a terrorist attack upon a 90-ton ultrahazardous material rail shipment in the Capitol area would not be limited to the Capitol building or even the federal complex in downtown D.C.

15. A Chlorine Institute publication, excerpts of which are attached hereto as Exhibit 7, addresses the effects of a chlorine release and shows that a standard 90-ton



chlorine tank car can produce a cloud at a level “Immediately Dangerous to Life and Health” (under US CDC guidelines) for 14.8 miles.

16. A U.S. Coast Guard template for tracking toxic gas dispersion, a copy of which is attached hereto as Exhibit 8, shows that a chlorine cloud emanating from a ruptured railcar can move 2 miles in 10 minutes.

17. A recent study conducted by the U.S. Naval Research Laboratory, excerpts from which are attached hereto as Exhibit 9, found that if an attack occurred during a celebration or political event in a setting similar to the National Mall, people could die at a rate of over 100 per second and up to 100,000 people could die within the first 30 minutes.

18. In a July 2004 report intended to guide urban areas for preparedness for terrorist attacks, an excerpt from which is attached hereto as Exhibit 10, the Homeland Security Council estimated that an attack in an urban area could result in 17,500 deaths, 10,000 severe injuries and 100,000 hospitalizations.

19. In testimony before the DC Council on January 23, 2004, Benjamin A. Gitterman, who is Co-Director, Mid-Atlantic Center for Children’s Health and the Environment and an Associate Professor of Pediatrics and Public Health, Children’s National Medical Center and George Washington University, stated that “[a]cute, or short-term exposure to high-levels of chlorine in humans results in chest pain, vomiting, toxic pneumonitis (toxic lung inflammation), pulmonary edema (water or swelling on the lungs), and death . . . . Exposure to a leak or immediate release from a 90-ton rail car can easily and quickly (within a few minutes) be fatal.” A copy of Dr. Gitterman’s testimony is attached hereto as Exhibit 11.

20. In a letter to DC Councilmembers Patterson, Catania and Schwartz, dated January 22, 2004, Dr. Linda Green, Secretary of the Metropolitan Washington Public Health Association, stated that "Federal and District health officials have not effectively educated the city residents who are at risk regarding such scenarios of the consequences." A copy of Dr. Green's letter is attached as Exhibit 12. This letter also urged the DC Council to correct the risks created by the fact that no government agency had at the time "mandated sensible re-routing of even the most dangerous cargoes to avoid providing high-profile attractive targets for terrorists."

21. Dr. Gitterman further noted in his testimony that in a significant release first responders -- such as police, firefighters, and medical personnel -- could be overwhelmed and that such a release of toxic gases could "kill people immediately before all of our emergency readiness can be of any use."

22. In January 23, 2004 testimony before the DC Council, Ed Stern, who has spent 14 years analyzing health and safety risks, and the costs, benefits, and economic and technical feasibility of safety and health regulations for the OSHA policy office, stated that "[m]ost people do not know that even when a building's ventilation is turned off, outside air and contaminants will get into the building at a significant rate," and that while "the Department of Labor's Emergency Response Team is trying hard to protect the employees of the Department in case of emergency . . . they cannot stop weapons of mass destruction that are rolling through and by the seat of the Federal Government in trucks and trains."

23. The effects of past fatal toxic cloud releases in locations with smaller populations than the District -- such as the leak in Graniteville, South Carolina that killed

9 individuals in January 15, 2004 and a release in a rural area outside of San Antonio, Texas that killed 3 individuals on June 28, 2004 -- suggest the vaster death and injury potentials in major cities with dense populations of workers, residents, visitors and commuter passengers. These incidents also illustrate the fragility and frequent ineffectiveness of emergency response efforts in case of a significant release.

24. The FBI has issued warnings that terrorists have expressed an interest in attacking rail shipments of ultrahazardous materials. The FBI has stated may try to destroy key rail bridges and sections of track to cause derailments or target hazardous materials containers.

#### **The Lack of Meaningful Federal Action**

25. To my knowledge, no federal agency has analyzed and set forth a decision regarding the routing of ultrahazardous cargoes through the District. In testimony before the DC Council on January 23, 2004, a representative of CSXT, H.R. Elliot, stated: "It is possible that the federal government might determine in the future that reroutings of certain hazardous materials are warranted under certain circumstances, but that is a matter for the federal government to determine after consideration of the national interests as a whole."

26. An April 6, 2004 letter to Greenpeace from Admiral David Stone, Administrator of the Transportation Security Administration, stated that a TSA working group was "established to explore and determine solutions in securing the District of Columbia rail corridor" and that a "written report" would "serve as the baseline for shaping national policies in the transport of hazardous materials . . .". As a result, the DC Council agreed to temporarily postpone action on re-routing legislation while the federal

government explored options. However, this promised report has never been made public. To my knowledge, the Transportation Security Administration has never finalized such considerations nor reached any such determination of national policies applying to the District or any other cities. A copy of Admiral Stone's letter is attached hereto as Exhibit 13.

27. In DC Council hearings, industry representatives stated that measures they had taken to protect against terrorist attacks were confidential. C.T. Howlett, Jr., of the Chlorine Chemistry Council, told the DC Council in testimony presented on January 23, 2004: "I know that laying out the detail of the chlorine rail security plan for the Committee today would make an extremely persuasive case, and I believe you would be impressed by its stringency, comprehensiveness, and accountability. But I will not do that." CSXT's statement to the DC Council on January 23, 2004 stated that "security concerns limit public discussion of the details of these plans [to protect ultrahazardous rail cargoes from terrorism]."

28. Whatever measures the federal government or industry representatives may have taken, such measures are not likely to prevent individuals from having unauthorized access to railroad tank cars containing ultrahazardous materials or entering areas from which a terrorist could likely cause a catastrophic release by firing at such a tank car with a shoulder-fired missile or rocket propelled grenade.

29. Although CSXT and the government emphasize CSXT's compliance with existing federal hazardous materials regulations, these existing regulations are based almost entirely only on the historical experience of and potential for accidental spills --

not on the potential for deliberate and catastrophic terrorist releases in urban or other High Threat areas.

30. One of the rail safety measures discussed at the DC Council hearings was tank car design. For example, The American Chemistry Council told the DC Council that tank car design criteria are studied and approved by the U.S. Department of Transportation. George Gavalla, Associate Administrator for Safety, Federal Railroad Administration (FRA), similarly provided an "overview of FRA's hazardous materials safety and security measures" which noted inter alia that "incident survivability, this includes the establishment of crashworthiness standards for railroad tank cars to prevent the loss of hazardous materials in the event of an accident."

31. However, all of the specific measures described by Mr. Gavalla to improve the design of railroad tank cars -- such as changes to shelf couplers, installation of head shields or thermal protection, and bottom outlet protection -- were implemented a long time ago and were reactions to significant accidental releases. They therefore were aimed at addressing aspects of derailments and other accidents. None of these measures nor any other design changes subsequently have addressed the threat of terrorism.

32. The walls of existing rail tank cars are not designed to withstand conventional weapons easily obtained by terrorists, such as shoulder-fired missiles.

33. Rerouting is an effective strategy for reducing the risk of a terrorist attack on ultrahazardous shipments and has been used by government agencies in the past to reduce terrorism and other risks associated with transportation.

34. The Center for Disease Control and the Agency for Toxic Substances and Disease Registry -- both agencies within the United States Department of Health and

Human Services -- have recently stated on their Web sites that, in responding to the deadly risk posed by large-scale, acute releases of hazardous materials during rail transit, governments should consider implementing the "[r]out[ing of] hazardous material away from densely-populated areas where feasible." A copy of this information is attached hereto as Exhibit 14.

35. After the September 11, 2001 attacks, the Pentagon blocked all large truck traffic along Route 110 traffic in Arlington and then permanently moved that road away from the Pentagon.

36. The United States Coast Guard has authority to divert ships carrying explosives which it deems dangerous from the path they would otherwise follow.

37. Although CSXT states that it has engaged in voluntary rerouting, the nature of that rerouting has been very difficult to assess from CSX's previous statements on this issue. In January 2005, members of the DC Council had received the impression from CSXT that the voluntary rerouting had routed all of the ultrahazardous material shipments regulated by the then proposed bill away from the District of Columbia. (See Washington Post article attached hereto as Exhibit 15, which quotes Councilmember Schwarz as stating that ultrahazardous materials were no longer being transported through the District).

38. In February 2005, CSXT stated that many such ultrahazardous shipments were still being transported on CSXT's East-West line passing near the Capitol area. And statements CSXT has made in discovery conducted in this litigation indicate that at least some ultrahazardous materials shipments, including chlorine shipments, have continued to be transported on CSXT's North-South line which passes within four blocks

of the Capitol, even after the voluntary rerouting was implemented (*See* CSXT discovery responses attached hereto as Exhibits 16 and 17).

**Rerouting Trains to Non-Target Communities  
Eliminates or Substantially Reduces the Aggregate Risk**

39. Contrary to the arguments of CSXT and its supporters in this proceeding, rerouting cargoes around highly attractive target cities or national icons does not result in “shifting of the risks” for terrorist attacks to other jurisdictions. Mandating rail and/or highway routes that go around high-threat areas and through non-target areas significantly reduces, perhaps to zero, the attractiveness of those ultrahazardous materials cargoes for terrorist purposes.

40. The existing severe terrorism risk to the District of Columbia stems from both iconic terrorism targets and population characteristics of the District that differentiate it from the less populated (and less densely populated) locations to which rerouted materials would move if rerouted efficiently and from a counter-terrorism perspective.

41. A risk assessment model recently classified the District as one of only four “tier 1” cities that is one hundred times as likely as the average American city to be targeted in a terrorist attack.

42. The US insurance industry and its consultants also depicted the terrorism threat qualitatively and quantitatively, showing the threat to different counties and zip codes in US in a color-coded map. I am attaching copy of these maps hereto as Exhibit 18. AIR Worldwide, Inc. has also provided maps of the DC area showing the highest risk areas within the District and also in the Eastern region, assessing the terrorism risk for

communities in I-95 corridor -- where CSXT's North-South line through the District runs -- and for the I-81 corridor, where the alternative Norfolk Southern line runs.

43. These maps clearly show that there is substantially less risk from a terrorism-prevention perspective when one reroutes ultrahazardous cargo around the Capitol Exclusion Zone instead of transporting such cargo through it.

44. Thus, it is clearly wrong to think that, by adding a small number of ultrahazardous shipments to those that already go through these non-target communities, one will increase the risk of a terrorist incident to the same level of risk that currently exists in the Capitol Exclusion Zone (or any level of risk close to it).

45. These AIR Worldwide findings match other indications that Washington DC is far more likely to be a terrorist target than most other locations. Having already been attacked by airliner and anthrax, Washington DC receives substantial funding from US DHS for counterterrorism efforts under the Urban Areas Security Initiative, amounting to approximately \$82 million for FY 2005, an amount that is higher than that of any city other than New York City.

46. The District has been the subject of distinctive protection in airline security rules: Reagan National Airport remained closed far longer after September 11 than any other airport.

47. Although it has since re-opened to air traffic, Reagan National has done so subject to security restrictions more stringent than those at other airports: It is the only airport where travelers must remain seated for 30 minutes after take-off or before landing.

48. Moreover, the fact that an ultrahazardous materials release in downtown Washington DC, near the Capitol, could cause tens of thousands or more deaths than a



release in a sparsely-populated town (like those where Norfolk Southern lines runs) makes terrorists far more likely to target hazardous materials shipments in Washington DC than in smaller communities, since they will likely seek to produce a large number of fatalities.

49. While CSXT does not take account of distinctive District-specific risks in its pleadings, it has acknowledged it in documentation provided to the DC Council. A February 1, 2005 memo from CSXT's counsel stated that "it cannot be disputed that a terrorist attack on a rail car of hazardous materials within a densely populated area could have serious consequences, and that terrorism countermeasures within the District of Columbia must take into account the fact that the District is the capital of the United States of America."

50. I have not seen any argument made in support of, nor do I agree with, CSXT's claim that "detouring hazardous shipments around the District would not produce any system-wide improvement in safety or security" (on page 19 of its Memorandum of Points and Authorities in Support of Preliminary Injunction) which takes specific account of the heightened terrorism risk that exists in the District of Columbia.

51. The terrorism risk to the District does not only threaten members of Congress, but also hundreds of residents and workers in the District. In testimony before the DC Council on January 23, 2004 and November 22, 2004, Washington DC residents and workers expressed concern about the possibility that a release of ultrahazardous materials would present a significant threat to them, their neighbors, and co-workers.

52. THIS PARAGRAPH INTENTIONALLY LEFT BLANK

53. On November 22, 2004, the DC Council received testimony from Pleasant Mann, a representative of Federal Emergency Management Agency workers, stating: “FEMA Headquarters is located about ten feet away from the railroad tracks that have drawn so much of the attention of the Council and the community . . . However, even after the issue started to gain prominence this year, a number of FEMA employees and managers have expressed concern about the situation and wondered if anyone was actually doing something about it. A member of FEMA’s management pointed out that one photograph of a chlorine tank car that appeared in the *Washington Post* was taken right outside our building . . . Like my co-workers, I believe it is time for someone to take responsibility for the risk presented to the workers and residents of the District of Columbia by the rail transport of hazardous materials.”

54. On November 22, 2004, the DC Council received testimony from Alexander Padro, a representative of a Neighborhood Advisory Commission, raising similar concerns about the potentially devastating effects of a successful terrorist incident, noting that if an attack happened at night, “entire neighborhoods would be wiped out in their sleep. If the attack were to take place during the day, the loss of life would be far higher with toxic fumes being pulled into Metro tunnels, office buildings, schools, government buildings and other facilities.”

55. The Metropolitan Washington Central Labor Council, representing all private and government workers in Washington DC trade unions, has strongly supported the DC Terrorism Prevention Act. The DC Council also received approximately 2,000 e-mails urging it to pass the Act.

**Rerouting Ultrahazardous Cargoes Outside of  
the Capitol Exclusion Zone is Feasible**

56. The fact that CSXT might have to engage in interchange of cargoes with other railroads to route shipments most efficiently from a security perspective -- and in compliance with the DC Terrorism Prevention Act's security requirements -- does not make such compliance unreasonable or impossible.

57. For decades, railways have agreed to complex interchange arrangements, some with a significant effect on their operations. Thus, in 1999, CSXT and Union Pacific agreed on an arrangements that would "maximize the use of each interchange point [between the two railways]" with the major interchange points in Chicago, St. Louis, Salem, IL, Memphis, and New Orleans. The railroads did not find the transition to this arrangement unduly burdensome even though it was expected to "take six months to a year" when CSXT and UNP agreed to the arrangement. This is a much longer time frame than that which CSXT has said would be required to implement the comparatively far more minor rerouting required by the DC Act's security measures to reduce terrorism risks. I am attaching with a copy of a news release describing this arrangement, which I provided to the DC Council with my January 23, 2004 testimony, as Exhibit 20.

58. CN Railroad also recently made interchange agreements with BC Rail despite the additional volume of traffic it would invite. On the contrary, the railroads agreed that "[e]ach railway will be responsible for providing adequate crews, locomotives power, and transit times to handle the additional traffic volumes." I am attaching with a copy of an excerpt of a document describing this arrangement, which I provided to the DC Council with my January 23, 2004 testimony, as Exhibit 21.

59. Norfolk Southern's statement that it would refuse to enter such an interchange agreement even if it provided the most direct route available (after implementation of the DC Act's anti-terrorism requirements) appears to be an unusual deviation from the economic efficiency principles publicly enunciated by railroad industry spokespersons.

60. For example, Ed Hamberger, President of the AAR, stated such an efficiency principle at the hearing on the Status on Railroad Economic Regulation, March 31, 2004, before the Subcommittee on Railroads of the US House Committee on Transportation & Infrastructure. He said "[r]ailroad roads cannot refuse to use multiple-railroad routes that are reasonably more efficient than their own single-line routes."

61. Norfolk Southern would be violating the principle expressed by Mr. Hamberger at this hearing if it forced CSXT to use the much longer CSXT route that CSXT claims it would have to use in the absence of Norfolk Southern's consent to permit shipments to travel on its lines as a result of the DC Terrorism Prevention Act.

62. To my knowledge, no analysis has been conducted by the railroads or the federal government on whether the increased operating expenses associated with rerouting under the DC Terrorism Prevention Act are justified, given the tens of thousands of lives that could be saved (and significant economic damage) that could be avoided by implementing the Act's rerouting measures.

63. One of the only previous public officials' weighing of similar considerations I have seen is the federal Department of Transportation consideration, in Docket HM-232, of whether the benefits of averting a single Oklahoma City-scale terrorist attack justifies the multimillion dollar costs of proposed Security Plan

regulations. In that analysis, the benefit of the proposed anti-terrorism measures was found by the Department of Transportation to justify the costs.

64. The DC Terrorism Prevention Act is narrowly-crafted to address the grave terrorist facing the District in the least disruptive way possible. The Act regulates only a small subset of hazardous materials (and only certain quantities of those materials) likely to threaten thousands of lives in the event of a terror attack.

**DC's Antiterrorism Measures are Not Likely to  
Significantly Increase the Risk of Accidents to Other Locations**

65. Analyses of how the DC Council measure will impact rail safety and security should always distinguish between risks of accidental chemical releases and risks of terrorism-caused releases

66. Unlike the risk of a terrorist attack on an ultrahazardous materials cargo, the risk of accidents is one that the railroad industry has much longer experience in addressing and preparing for.

67. When the most direct route carries ultrahazardous materials through a densely-populated area that is an attractive target for terrorists, then the most direct route will probably not be the best one from a security perspective.

68. As Professor Glickman has testified in his declaration, the alternatives that CSXT claims it would have to use for shipment routes it analyzes are not the only alternative routes, and not the most efficient alternative routes, that could be used were CSXT to comply with the DC Terrorism Prevention Act.

69. The maps attached with Professor Glickman's declaration as Exhibit 4, which I have also reviewed, show alternative routes -- other than those CSXT claims it would be required to use to comply with the DC Terrorism Prevention Act -- that would

substantially decrease the population exposure below that for the current CSXT line through D.C. These maps show alternatives both for CSXT's North-South route (including the alternative Norfolk Southern line) and to its East-West route through the Capitol Exclusion Zone.

70. Publicly-available maps show that the Norfolk-Southern I-81 corridor route is a major backbone route for the military's strategic military freight rail system ("STRACNET").

71. Risk equals the consequences (of a potential release) times probability of a release, that is ( $R = C \times P$ ). A comparison between the safety and security of rail shipments with and without the DC Terrorism Prevention Act's rerouting would have to take into account not only the effect on the probability that each type of hazardous materials release (by accident or by terrorism) would occur, but also the harms that would likely result from each kind of release if one were to occur.

72. If CSXT diverted ultrahazardous shipments from its North-South line passing through Washington DC to the Norfolk Southern line 50 miles to the west, a parallel north-south route, not only would the probability of a terrorist attack involving such shipments likely drop nearly to zero, but the incremental accident risk for towns such as Luray or Hagerstown, on the Norfolk Southern line, is much lower for these additional hazmat cargoes on their rail line, since any kind of chemical release (terrorism-caused or accidental) in any such location with a substantially smaller and less densely concentrated population than the District is of much smaller consequence than it would be in downtown Washington DC.

73. Moreover, an accidental release of chlorine or other hazardous material (e.g., from a leak) is likely to be less devastating in its effect than a release engineered by terrorists, which would likely be planned to be as unmanageable, and as devastating in its effect, as possible.

74. Terrorists, for example, could cause more damage to a rail tank car than would likely be caused by most accident-related leaks, by using a shoulder-fired missile or similar weapon to puncture or rupture a rail tank car, thus suddenly releasing all of its contents, or by puncturing or rupturing multiple rail car tanks simultaneously, causing a release of significantly more ultrahazardous materials than most derailments release. Terrorists are also more likely to choose as targets for such a release densely-populated areas in order to maximize the consequences of such a release.

I, Fred Millar, pursuant to 28 U.S.C. § 1746, do hereby declare under penalty of perjury that the foregoing is true and correct. Executed on March 14.

/s/  
Fred Millar



**Petition for Reconsideration  
to STB**

**Exhibit 7**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

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	:	
CSX TRANSPORTATION, INC.,	:	
	:	
Plaintiff,	:	
	:	
vs.	:	Civil Action No.:
	:	1:05-DV-00338
ANTHONY A. WILLIAMS and	:	
DISTRICT OF COLUMBIA,	:	Hon. Ellen Segal
	:	Huvelle
Defendants.	:	
	:	
-----	X	

Washington, D.C.

Thursday, March 3, 2005

The deposition of JOHN M. GIBSON, JR.,  
called for examination by counsel for Defendants,  
pursuant to notice, in the offices of the  
Attorney General for the District of Columbia,  
Sixth Floor, 441 4th Street, N.W., Washington,  
D.C., convened at 10:15 a.m., before Emma N. Lynn,  
a Notary Public in and for the District of  
Columbia, when were present on behalf of the  
parties:

1 the chart and work from left to right, if that is  
2 okay.

3 BY MS. MULLEN:

4 Q. Perfect.

5 A. The "D.C. Area PIH and Explosive HAZMAT  
6 Reroute Analysis" is the header of it. And when  
7 it says PIH and Explosive HAZMATs, this  
8 aggregation of data refers to the standard  
9 transportation commodity codes. We call them  
10 STCCs in the industry, for the materials that are  
11 banned in the D.C. Act.

12 Next below that are loads empty and  
13 total. So the act applies to loaded cars, empty  
14 cars and then we summarized, we totaled those  
15 cars.

16 Under the loads, there are three  
17 categories of data. One is the number of annual  
18 shipments. The next is the additional annual car  
19 miles, and the finally is the additional annual  
20 car handlings. Under the empty column, you have  
21 the same three categories, and the same under the  
22 total.

1 The title is different under the  
2 total. It says annual shipments and empty trips.  
3 The total column adds for the like columns the  
4 loads and the empties. Are we okay?

5 Q. We are fine.

6 A. Below that are three rows. The first  
7 row is base case with no reroute. That is the  
8 current operating plan. Our computer models that  
9 are required for this work are charged with  
10 routing traffic the most efficient way, minimizing  
11 car loadings and handlings. So if there were no  
12 reroutes, then obviously there would be no  
13 additional car miles and there would be no  
14 additional handlings. So that's why that is the  
15 base case and there are zeros in those columns.

16 The next one is the Virginia Avenue  
17 tunnel reroute only, and it shows the impact of  
18 not being able to use the Virginia Avenue tunnel  
19 for either loads or empties, individually, and  
20 then summarized together, and what impact that  
21 would cause for the individual cars that would  
22 have used that route in the efficient operating

1 plan.

2 (Witness and counsel conferring.)

3 THE WITNESS: The Virginia Avenue  
4 tunnel is a fixture on CSX. It is on what is  
5 commonly called the I-95 route or the north-south  
6 route. It is a specific location on that line  
7 just north of where passenger trains would go into  
8 Union Station. So that would be freight only  
9 moves associated with that particular location.

10 The next row is Virginia Avenue and  
11 metropolitan capital sub-reroute and that is if  
12 neither the east-west B&O line as we described in  
13 the affidavit nor the north-south I-95 line are  
14 available, the cars that are currently involved in  
15 these STCC codes would have to take the additional  
16 miles and incur the additional handlings for both  
17 loads and empties shown on that line, and they are  
18 totaled again on the right-hand side.

19 BY MS. MULLEN:

20 Q. How did this translate into dollars  
21 and cents?

22 A. We didn't do a specific cost study for

1 any of this, for either the Virginia Avenue --  
2 I-95 reroute or the north-south or east-west  
3 reroute.

4 Q. Why didn't you do a cost study?

5 A. Well, there are three kinds of costs.  
6 There are direct costs. There are indirect costs,  
7 and then there are, you know, other outside our  
8 company costs either to shippers or to the public.

9 The direct costs are a fraction of the  
10 total costs, and it would be misleading to use  
11 that as any kind of decision point.

12 Q. And why would it be misleading?

13 A. Because of the size of the direct  
14 costs.

15 Q. Because they are a fraction of the  
16 total?

17 A. Yes.

18 MR. NATHAN: Was that a yes?

19 THE WITNESS: Yes. I agree.

20 BY MS. MULLEN:

21 Q. And indirect costs?

22 A. For CSX, it would include elements of

1 the congestion primarily and inefficiency. We  
2 have a rail network that is pushing its physical  
3 capacity and any inefficiencies thrown into that  
4 create an issue that simply can't be predicted  
5 and it is very difficult to measure.

6 The indirect costs for customers which  
7 include lengthening supply chains and throwing  
8 uncertainty into the movement would require new or  
9 additional equipment that is not in the  
10 marketplace at the moment and could, depending on  
11 circumstance, lead to potential shutdowns  
12 depending on their inventory and their delivery  
13 schedules.

14 Also from an indirect standpoint it  
15 puts the risk of additional miles and additional  
16 handlings in terms of possible release in other  
17 communities.

18 Q. And that you associate with an indirect  
19 cost the safety and security issues that might  
20 occur in areas outside of Washington, D.C.?

21 A. As a result of additional miles and  
22 handlings, yes, you increase the risk of an

1 A. If those could be calculated, yes.

2 Q. You are saying that it is impossible to  
3 calculate the indirect costs?

4 A. Yes.

5 Q. Would it be fair to say that the part  
6 of the overall cost might be speculative, but it  
7 is not necessarily impossible to come to some  
8 rational amount or estimate of the cost? I am  
9 excluding things that would be catastrophic in  
10 nature. In other words --

11 A. From my experience, no.

12 MR. NATHAN: I don't understand the  
13 question. Maybe you could rephrase the question.

14 BY MS. MULLEN:

15 Q. Did you understand the question?

16 A. You are asking if it would be possible  
17 to speculate as to the indirect costs?

18 Q. Actually it wasn't a very good  
19 question. Here is what I am driving at. In  
20 calculating the cost of rerouting, if you  
21 eliminate the possibility of something  
22 catastrophic in another geographical area --

1 additional -- of some release.

2 Q. I guess I need further explanation on  
3 this. You say that the direct costs are such a  
4 fraction of the total costs that it would somehow  
5 be misleading. Am I characterizing your  
6 testimony correctly?

7 A. I believe that, yes.

8 Q. Could you explain why. The direct cost  
9 is part of the overall cost, correct?

10 A. Yes.

11 Q. Then it would have to be part of the  
12 equation. So it wouldn't necessarily be  
13 misleading. It would be a fraction of the total  
14 cost, but it would be part of the whole, correct?

15 A. Yes.

16 Q. So you are saying that the reason you  
17 didn't do a cost out on the direct is because it  
18 would be misleading?

19 A. Yes.

20 Q. And it wouldn't be misleading if it is  
21 taken in conjunction with the indirect and the  
22 outside costs?

1 A. Okay.

2 Q. -- because we all know that might be in  
3 the billions if there was some sort of accidental  
4 leakage that was of great magnitude, if you  
5 eliminate something on the most extreme side,  
6 because we don't know what that might cost, isn't  
7 there some sort of formula that you use in order  
8 to know what the company is going to be spending  
9 on rerouting?

10 A. No, not on the indirect costs.

11 Q. Let's look at the direct costs then.

12 Can you give us any figure as to the direct cost  
13 of the rerouting in this particular case, what it  
14 would cost your company?

15 MR. NATHAN: Recognizing he has  
16 testified there is no study of this, you are  
17 asking him for a best estimate as he sits here  
18 today?

19 MS. MULLEN: Yes, we recognize you  
20 didn't do a cost study.

21 THE WITNESS: Right.

22 BY MS. MULLEN:

1 Q. But I am assuming with your vast  
2 experience that you have some idea.

3 A. There is a couple of direct costs that  
4 could be applied to the data that is here that  
5 would ballpark some of the direct costs from a car  
6 mile standpoint --

7 MS. SPRAGUE: Just keep in mind  
8 confidentiality issues.

9 MS. MULLEN: Are you instructing him  
10 not to answer because there is something  
11 confidential?

12 MS. SPRAGUE: There is a way to answer  
13 that would be a confidential way so that the  
14 information could be supplied so we could not get  
15 into proprietary information since we are not  
16 operating under a protective order.

17 MR. NATHAN: Which we submitted.

18 MS. MULLEN: I know the parties  
19 couldn't come to an agreement on a protective  
20 order which puts us automatically at a  
21 disadvantage in terms of asking questions.

22 MS. SPRAGUE: I think there is an answer

1 the counting of the empty cars as well?

2 A. It would count empty cars. It would  
3 not have categories of direct costs that a  
4 specific study could identify, you know, in terms  
5 of things like specific crew costs, specific fuel  
6 costs, those kinds of things.

7 Q. Which would be additional costs?

8 A. Yes.

9 Q. So you would be exceeding the \$2 to \$3  
10 million estimate?

11 A. Well --

12 Q. Or they would be included?

13 A. Estimating, I think it would still be  
14 in that range as a guess.

15 Q. The last batch of documents that you  
16 produced is a database printout. Can you tell us  
17 about this printout?

18 A. This is graphical representation of the  
19 gross ton miles on our network by line segment.  
20 So on the left is the identification of the  
21 subdivision, which is a portion of our entire  
22 network, and then there are gross ton miles in

1 you can get that would not get into specific  
2 proprietary information. I am just cautioning the  
3 witness to keep that in mind in answering.

4 THE WITNESS: Without the specifics of  
5 how to get their component-by-component of cost,  
6 you know, the direct costs on a system, average  
7 basis of cost, without looking at these  
8 specifically I would expect it would be in the \$2  
9 to \$3 million range per year.

10 BY MS. MULLEN:

11 Q. And that is specific to the rerouting  
12 that is at issue in this case?

13 A. It is a generally applied cost of  
14 moving cars in the CSX network applied to the  
15 miles and handlings that are on this page. It is  
16 not specific --

17 MR. NATHAN: The witness is referring  
18 to Exhibit 2.

19 THE WITNESS: It is not specific. It  
20 is system average cost.

21 BY MS. MULLEN:

22 Q. Does the system average cost include

1 each direction on that specific line segment.

2 Q. These are ton miles as opposed to car?

3 A. That's correct.

4 Q. And what's the significance of this  
5 database?

6 A. Well, there are -- in the affidavit we  
7 talk about the difference between the kinds of  
8 lines that CSX has. Some are high volume, high  
9 density main lines, some are secondary main lines,  
10 some are strictly branch and local traffic lines.

11 And this table would, you know, be a more precise  
12 way of describing those line segments.

13 Q. Is this table referenced specifically  
14 in any paragraph of your affidavit?

15 A. No, it is not.

16 Q. It would serve as a base document for  
17 the information in your affidavit?

18 A. Yes.

19 MS. MULLEN: Do you think for  
20 clarification it would be a good idea to identify  
21 those documents just by number, or do you think  
22 the record will be clear without that? We have

1 referred to Mr. Gibson's affidavit and the one  
2 table. Do you think that will be clear enough?

3 MR. CASPARI: Which of the documents  
4 are you referring to?

5 MS. MULLEN: This group. This is all  
6 we have.

7 THE WITNESS: We have an index.

8 MS. MULLEN: Mr. Gibson pointed out we  
9 have an index. That's fine. There are so many I  
10 didn't want it to get confusing.

11 MS. SPRAGUE: I think you made a clear  
12 record.

13 BY MS. MULLEN:

14 Q. There are several questions I have  
15 regarding the rerouting. You are the expert, not  
16 me. So please, if you don't understand my  
17 questions, I will be happy to rephrase.

18 The first question I have is what  
19 hazardous materials and in what quantity and with  
20 what frequency were removed from the north-south  
21 line?

22 A. We did not aggregate the data that

1 way. I don't have that. I don't know that.

2 Q. Would it be possible for you to  
3 aggregate the data in that fashion?

4 A. Yes.

5 Q. And what would you have to do in order  
6 to come up with the answers to those questions?

7 A. We would have to relate to two  
8 databases covering the traffic that is in  
9 question and pull data from those two, one that  
10 deals sort of with our commercial side of the  
11 house and one that deals with our transportation  
12 side of the house, and then we would be able to  
13 aggregate it the way you mentioned.

14 Q. Is Exhibit 2 at all useful in answering  
15 the questions?

16 A. This one (indicating)?

17 Q. Yes.

18 A. Again, we did not aggregate in that  
19 manner. We pulled against all of the STCC codes  
20 that are subject of the act, but did not subtotal,  
21 so to speak, any of the data in the way she is  
22 asking.

1 Q. The STCC codes, again, would you tell  
2 me what that means?

3 A. The Standard Transportation Commodity  
4 Code. It is usually abbreviated S-T-C-C, commonly  
5 called STCC.

6 Q. Would you be able to tell us what  
7 hazardous materials continue to be shipped on the  
8 north-south line through the District?

9 A. There are -- in the time since May,  
10 since our voluntary reroute?

11 Q. Yes.

12 A. Primarily it is the empties and then  
13 there is a handful of cars that we voluntarily  
14 rerouted that were not voluntarily rerouted that  
15 are covered by the ordinance. And in that period  
16 it is about 10 cars.

17 MR. NATHAN: I think she is asking what  
18 were the hazardous materials.

19 THE WITNESS: They were primarily  
20 chlorine and propane.

21 MS. SPRAGUE: Actually I thought you  
22 were asking generally hazardous material as a

1 broader class than the banned materials covered by  
2 the act. Is that what you were asking?

3 MS. MULLEN: No. I am asking what  
4 hazardous materials continue to be shipped on the  
5 north-south line.

6 MS. SPRAGUE: Then I object to the  
7 question because if that is not what you meant to  
8 say that's what you are asking. There are many,  
9 many hazardous materials, only a subset of which  
10 are covered by the act.

11 MS. MULLEN: I think your objection is  
12 a good one. Let's keep it only to those that are  
13 banned by the act.

14 THE WITNESS: Okay. Since May, above  
15 and beyond our voluntary reroute, the hazardous  
16 materials covered by the act moving on the  
17 north-south line are predominantly empty cars, and  
18 then there is a very small number, about 10, cars  
19 that have moved that were not part of the four  
20 STCC codes that we voluntarily rerouted which are  
21 covered by the ordinance.

22 BY MS. MULLEN:

1 Q. Same question but as it applies to the  
2 east-west line through the District.

3 A. Well, I think these numbers give you a  
4 good handle on what is moving east-west.

5 Q. When you say "these numbers," you are  
6 referring to what has been marked as Exhibit 2?

7 A. Right.

8 Q. And would you point out specifically  
9 what numbers you are referring to.

10 A. The total reroute of cars within the  
11 banned materials of the act of both Virginia  
12 Avenue and the Metro sub-reroute totaled 6,939  
13 loads, 4,461 empties for a total of 11,400 cars.  
14 If you subtract from that the Virginia Avenue  
15 reroute of 1,584 loads and 2,103 empty carloads,  
16 that would be the east-west volume.

17 Q. When you say "10 cars," what time span  
18 are you talking about?

19 A. Between May and January of '05.

20 Q. Ten cars a day?

21 A. Total.

22 Q. Total?

1 A. Right.

2 Q. Since May?

3 A. In the records we pulled, that's what  
4 we found.

5 Q. Has there been a variation in the  
6 routing of the banned materials between April  
7 2004 and March of 2005?

8 A. I'm sorry.

9 Q. Has there been a variation in the  
10 routing of the materials? I guess, have you made  
11 additional changes in the rerouting?

12 MS. SPRAGUE: I don't understand the  
13 question.

14 MR. NATHAN: I don't understand.

15 BY MS. MULLEN:

16 Q. Do you understand the question?

17 A. No.

18 Q. That's what is important. Not what  
19 your lawyers understand.

20 A. I understand that, but I don't  
21 understand the question.

22 Q. Then I am in trouble.

1 Well, can you just give us an idea of  
2 the rerouting and how it works, when you get to  
3 the District of Columbia.

4 A. Okay. Again, we have what we call an  
5 operating plan. That plan is a combination of  
6 computer technology and hands-on skilled  
7 understanding of the network by individuals who  
8 are expert at the territory.

9 That operating plan routes cars the  
10 most efficient way possible, trying to minimize  
11 handlings and car miles.

12 What we have done in order to effect  
13 the voluntary reroute is to eliminate the line  
14 segment for the commodities that we voluntarily  
15 rerouted going north-south through the D.C. area,  
16 what we commonly call I-95.

17 The computer-generated trip plan for  
18 every car then is created through our model, this  
19 ACT model that is described at the end, I think  
20 around 58, 59 paragraphs. That will be the next  
21 most efficient route for that car, again  
22 minimizing handlings and miles on the basis that

1 the line segment in question is not available.

2 So, in essence, if you take all of the  
3 possible, not all of the currently used, but all  
4 of the possible STCC codes covered by the  
5 ordinance, it is actually a little more than 2800  
6 possible commodities, many of which are reserved  
7 for future commodities that don't currently move,  
8 but you still have to protect against the entire  
9 set, and that is laid against a 330 yard network  
10 and every yard has instructions created for any  
11 car that might show up of that commodity wanting  
12 to take that route. So that is the operating plan  
13 and that's how the reroute occurs.

14 Q. Why were you voluntarily rerouting the  
15 banned materials in the Washington area?

16 A. In our approach to things we have a  
17 need to know sort of approach to security. I was  
18 told that in consultation with the Federal  
19 agencies, DSA, Homeland Security, there was a  
20 specific credible threat that the reroute of these  
21 cars on that line segment should be accommodated,  
22 and so we went forward with that.

1 Q. And you did so willingly based on your  
2 appreciation for the threat that could be posed  
3 in the District of Columbia, given its unique  
4 stature?

5 MR. NATHAN: I object to that.

6 THE WITNESS: I don't have specific  
7 knowledge of that.

8 MS. MULLEN: Hold on. What is the  
9 basis for your objection?

10 MR. NATHAN: I object to the phrasing  
11 of the question that includes words that are not  
12 the witness's words.

13 MS. MULLEN: If the objection is to the  
14 characterization, fine. Noted.

15 BY MS. MULLEN:

16 Q. Would it be fair to say you recognized  
17 that the District of Columbia is unique in stature  
18 because it is the capital?

19 MR. NATHAN: When you say "you" --

20 MS. MULLEN: I am asking the question.

21 MR. NATHAN: I object to the question  
22 because the witness has told you that it is on a

1 you are not personally who I am talking about.

2 We are talking about your company, of course.

3 Is it your understanding that the  
4 District of Columbia is unique in that it is the  
5 capital of the free world and that we have been  
6 under threat?

7 MR. NATHAN: I object. Once again,  
8 when you say "is it your understanding," you mean  
9 Mr. Gibson's or the company's? I don't think we  
10 need this. This is not very useful. Your  
11 characterization --

12 MS. MULLEN: What is not useful?

13 MR. NATHAN: Your characterization of  
14 D.C. as the capital of the free world.

15 This is a railroad man who knows about  
16 operations. He gave an affidavit and this issue  
17 is about what is in his affidavit. That's what  
18 the judge said we were having this deposition  
19 about. Not about discussions of the free world  
20 and Washington's place in the free world.

21 MS. MULLEN: It does go to the heart  
22 of this case because we are unique and that's why

1 need-to-know basis and this is what he  
2 understands. When you say "you," these are not  
3 decisions he made, and I don't hear that he  
4 participated in them. And I also think you are  
5 attempting to put words in his mouth.

6 If you ask what the company did and his  
7 understanding of the basis for the company, I have  
8 no objection. But try to do that without leading  
9 questions and without misleading that this is  
10 something that he participated in or has firsthand  
11 knowledge of.

12 MS. MULLEN: Are you finished?

13 MR. NATHAN: Yes.

14 BY MS. MULLEN:

15 Q. Mr. Gibson, I am in no way trying to  
16 put words in your mouth. Please, at any time if I  
17 do not correctly state your position, make it  
18 clear for the record, because it is your  
19 testimony. Not mine.

20 Also when I say you, I am not speaking  
21 of you personally, sir. I understand what your  
22 position is and how decisions are made and that

1 the legislation was drawn.

2 MR. NATHAN: That's your argument, but  
3 let's put questions to the witness that are  
4 within the range of what the judge said this  
5 deposition should be about.

6 MS. MULLEN: We don't need all this  
7 discussion. Your objection has been noted for the  
8 record.

9 BY MS. MULLEN:

10 Q. Why don't we turn then to a discussion  
11 about your computer simulation and optimization  
12 models.

13 A. Okay.

14 Q. Can you identify each of the computer  
15 simulation and optimization models that you  
16 referred to in paragraph 4 of your affidavit.

17 A. They are basically described in, I  
18 believe, paragraphs 58 and 59.

19 Q. Right.

20 A. The Algorithmic Class Tracking System,  
21 as we call the ACTS, is our program for ensuring  
22 the routing of cars to trains, cars to blocks,



1 tell us what factors are considered in determining  
2 the most efficient routing?

3 A. It goes through iteratively and looks  
4 at every available route and calculates those for  
5 each of those routes. So it is literally hundreds  
6 and thousands of potential routes. All of that is  
7 calculated, and then the most efficient, you know,  
8 routing is the one that is produced.

9 Q. And what makes it the most efficient?

10 A. Minimizing our handlings and miles.

11 Q. And those are the two factors --

12 A. Yes.

13 Q. -- constants factors in determining  
14 what is efficient?

15 A. Correct.

16 Q. Thank you.

17 Do the computer models incorporate  
18 information about rail lines that are not operated  
19 or owned by CSX?

20 A. No.

21 Q. Do they model rerouting over the  
22 Norfolk Southern rail lines?

1 A. They do not.

2 Q. Is there a reason for that?

3 A. Well, all of our lines are operated in  
4 a safe manner. They were inspected by the FRA.  
5 The inherent safety, so to speak, of all of the  
6 lines is similar. But the speed or the velocity  
7 of that line, the operating rules, dictate given  
8 certain track structure and conditions that some  
9 routes are slower than other routes, but they are  
10 safe at that speed.

11 Q. Do you know of any model that uses  
12 safety as any sort of measurement or you can't do  
13 it based on the answer you just gave me?

14 A. I am not aware of that, no.

15 Q. Are you aware of any computer model  
16 program that has been used or could be used by  
17 any other entity with authority over or input  
18 into CSX's routing decisions?

19 MR. NATHAN: I object to the question,  
20 and it assumes facts not in evidence.

21 BY MS. MULLEN:

22 Q. Do you understand the question? For

1 A. No.

2 Q. Are they capable of modeling rerouting  
3 over the Norfolk Southern rail lines?

4 A. With a large amount of programming, it  
5 is capable. I don't know if it is feasible,  
6 because I don't know that the NS would release any  
7 of that data. We wouldn't release our data to  
8 some other railroads because it is integral to  
9 what our efficiency is. So it is a rare  
10 circumstance this kind of data would be shared.

11 Q. It is what keeps you competitive?

12 A. Yes.

13 Q. With the computer models, do you ever  
14 use them to request a rerouting over any other  
15 rail carrier?

16 A. We have not, no.

17 Q. No?

18 A. Not in my experience.

19 Q. Do the computer models take into  
20 account safety? And by that I mean the safety of  
21 using one route as opposed to another route for a  
22 certain shipment.

1 example, the FRA, TSA or the STB, that takes into  
2 account the safety of using one route as opposed  
3 to another?

4 MR. NATHAN: You are asking his  
5 knowledge of the computer program as to Federal  
6 agencies? Is that what you are saying?

7 MS. MULLEN: I am asking if he has any  
8 knowledge of any other entity with authority over  
9 or input into the CSX routing decisions.

10 THE WITNESS: Over the input in our  
11 rerouting? If I understand the question, no.

12 BY MS. MULLEN:

13 Q. The computer models that are used, are  
14 they pretty standard throughout the industry or  
15 are they unique to a particular company, if you  
16 know?

17 A. They are uniquely designed to each  
18 company. This particular software company is in  
19 use in some of the large railroads, but not all.

20 Q. Are you familiar with Norfolk  
21 Southern's computer models?

22 A. Only generally.

1 Q. Just there was a credible threat of  
2 some kind?  
3 A. Right.  
4 Q. And that was the extent of your  
5 conversation with him regarding the rerouting?  
6 A. Right.  
7 Q. Was 9/11 mentioned in this  
8 conversation?  
9 A. No.  
10 Q. Did you have more than one conversation  
11 with Mr. Blumenfeld regarding this matter?  
12 A. I believe there was a report when we  
13 had concluded the reroute work that we were done,  
14 and that we were beginning implementation.  
15 Q. That was a report?  
16 A. Verbal report that we are ready to  
17 begin implementation of the reroute.  
18 Q. Do you recall the substance of that  
19 verbal report?  
20 A. There was a sentence about that long,  
21 along with reports of other activities we were  
22 doing.

1 Q. Can you tag that with a date?  
2 A. It was in the April time frame, early  
3 April, I think. But I am not 100 percent sure.  
4 Q. And implementation began in May?  
5 A. Well, as we, I think, tried to describe  
6 in the affidavit, you can't just turn switches and  
7 make this happen. It is a flow. So the diversion  
8 of the flow, even once you send the instructions,  
9 takes quite a bit of time. So the diversion was  
10 effective beginning of May.  
11 Q. And how long has the diversion taken in  
12 this particular case?  
13 A. I have no knowledge.  
14 MS. SPRAGUE: How long did it take to  
15 divert the traffic?  
16 MS. MULLEN: To implement the plan. I  
17 realize it is ongoing.  
18 THE WITNESS: Three or four weeks from  
19 the time we sent the instructions to the time we  
20 believe that it was effective. Is that the  
21 question?  
22 MS. MULLEN: Yes.

1 THE WITNESS: Three to four weeks.  
2 BY MS. MULLEN:  
3 Q. Assuming for the moment that the  
4 legislation that is being challenged is passed,  
5 what, if anything, will you have to do differently  
6 than you are doing now regarding the voluntary  
7 rerouting?  
8 MR. NATHAN: Assuming it becomes  
9 effective?  
10 MS. MULLEN: Yes.  
11 THE WITNESS: We would essentially  
12 rework the same steps for the different flows and  
13 the different routes. So, again, you basically  
14 have a 3800 STCC code by 330 yard matrix for the  
15 empty moves on the I-95 corridor, the loaded  
16 moves on the east-west corridor, and the empty  
17 moves on the east-west corridor, and those  
18 instructions would have to be bar coded, so to  
19 speak, because they are exceptions to the  
20 operating plan.  
21 The computer, again, is constantly  
22 creating a trip plan for each car, and it would

1 have to, in essence, manually extract all of that  
2 from the normal flow, and then you would have to  
3 allow the stuff that is in transit to thin out and  
4 go away from those routes over that three-to-four  
5 week period.  
6 BY MS. MULLEN:  
7 Q. Can you break that process down and  
8 tell us specifically how that varies from what you  
9 are currently doing, if it does?  
10 A. It is the same basic process applied  
11 against different commodities and loads and  
12 empties and line segments.  
13 So it is, in essence, a repeat of what  
14 we have done, but for the new commodities above  
15 the voluntary ones on the loaded side, go against  
16 all of the empties on the north-south line, and  
17 then both loads and empties and the new geography  
18 of the B&O line.  
19 Q. The 10 cars that you referenced  
20 earlier in your testimony that have been rerouted  
21 since May --  
22 MS. SPRAGUE: They were not rerouted

1 since May.

2 BY MS. MULLEN:

3 Q. Those are the 10 cars not rerouted  
4 since May?

5 A. That's correct.

6 Q. They contained hazardous materials or  
7 they were empty?

8 A. I don't have the breakout as to  
9 whether they were full or empty. I just know  
10 they moved over the line segment. But I could  
11 get that answer. I think those are loads. Those  
12 are the loads.

13 (Witness and counsel conferring.)

14 THE WITNESS: And you understand  
15 that's the difference between the voluntary and  
16 the materials covered in the act.

17 BY MS. MULLEN:

18 Q. Yes, but go ahead and put that on the  
19 record. Explain what you are telling me.

20 A. That since May, when we had an  
21 effective reroute of the voluntary reroute, there  
22 have been approximately 10 loaded cars of

1 MR. NATHAN: You mean Exhibit 2 and you  
2 mean the affidavit?

3 THE WITNESS: Yes, that's right.

4 BY MS. MULLEN:

5 Q. Exhibit 2 is actually the extent of  
6 your analysis. There are no other documents?

7 A. That's right. That's correct.

8 Q. Thank you.

9 Has this document been shared with a  
10 Federal agency?

11 A. No, I don't think so. No.

12 Q. Is today the first time you are  
13 producing it for anyone other than your company?

14 A. Yes.

15 Q. In using the computer to determine the  
16 alleged effects of the rerouting required by the  
17 D.C. Act, did you analyze the impact of rerouting  
18 traffic from the CSX lines onto the Norfolk  
19 Southern lines?

20 MS. SPRAGUE: Asked and answered.

21 MS. MULLEN: You can answer.

22 THE WITNESS: We did not.

1 materials covered by the D.C. Act that were not  
2 covered by the voluntary.

3 So there were no -- to put it another  
4 way, there were no cars, loaded cars of the  
5 voluntary reroute that slipped through, if you  
6 want to look at it that way.

7 (Witness and counsel conferring.)

8 THE WITNESS: Well, the four STCC  
9 codes were chlorine and forms of propane. Those  
10 are the ones that we voluntarily rerouted.

11 BY MS. MULLEN:

12 Q. Your affidavit doesn't deal with  
13 materials other than chlorine or the propane, does  
14 it?

15 A. It does with respect to the reroute.  
16 This applies against the materials in the act  
17 (indicating).

18 Q. Have you used the computer model to  
19 determine the alleged effects of the rerouting  
20 required by the D.C. Act?

21 A. Yes. That's this table (indicating)  
22 and what is in the testimony.

1 BY MS. MULLEN:

2 Q. Did you share any sort of analysis with  
3 Norfolk Southern before they refused to agree to  
4 the rerouting?

5 A. No.

6 MR. NATHAN: Can I have the question  
7 and answer read back.

8 (The reporter read the requested  
9 portion of the record.)

10 BY MS. MULLEN:

11 Q. Have you had any conversations with  
12 members of the Norfolk Southern regarding this  
13 particular issue?

14 A. No.

15 Q. Do you know of anyone in your company  
16 who has?

17 A. Regarding this issue? No, I don't know  
18 of a specific conversation between the two.

19 Q. Did you read Mr. Osborne's affidavit?

20 A. I don't recall it. I don't recall  
21 which -- I read a lot of affidavits.

22 Q. Let me show it to you.

1 chain, and the interchanges that are required.

2 Also with that inefficiency they will  
3 over time be required to supply more equipment  
4 than they currently own because it will take  
5 longer for every single piece of that equipment to  
6 make a load and an empty.

7 Q. So you are essentially telling us, and  
8 correct me if I am wrong, that the problem is that  
9 it would be additional time and money for the  
10 customers? That's a major factor?

11 A. That is something that is a requirement  
12 in order to accomplish this. Another factor for  
13 either NS taking the traffic or us taking traffic  
14 from someone else would be what is the capacity  
15 and what is the routing and handlings that would  
16 be required on their network if they are taking  
17 our traffic, on our network if we take theirs, and  
18 is that business that supports our overall  
19 objective of moving goods to customers in an  
20 efficient way that allows us both to prosper.

21 Q. You said "over time" it would require  
22 additional equipment. What period of time are you

1 A. Yes.

2 Q. Did you analyze the safety and security  
3 impacts of such rerouting before doing so?

4 A. No.

5 Q. In the assessment method that is  
6 described in paragraph 22 of your affidavit, that  
7 was used to determine the effects or the alleged  
8 affects of the rerouting required by the D.C. Act,  
9 did you analyze the impact of the rerouting  
10 traffic from CSX's lines onto Norfolk Southern's  
11 lines?

12 A. No.

13 MR. NATHAN: When you keep asking about  
14 the rerouting of traffic on the Norfolk Southern  
15 lines, are you referring to the tracks or trains  
16 of Norfolk Southern, or do you know?

17 MS. MULLEN: We are referring to the  
18 tracks.

19 MR. NATHAN: So it would be the CSX  
20 trains running on Norfolk Southern tracks is what  
21 you are talking about?

22 MS. MULLEN: Right.

1 thinking about when you say "over time"?

2 A. If you put additional days into every  
3 car cycle, depending on how stretched the supply  
4 line is, and how available the equipment is, it  
5 could be instantly or it could be an investment  
6 that is required within a year or so.

7 Q. In paragraph 22 of your affidavit have  
8 you used an expert assessment method that you  
9 describe in this paragraph to quantify the risk  
10 of any sort of terrorist attack in the District  
11 of Columbia?

12 A. No.

13 Q. So it would be fair to say that you  
14 didn't reach any conclusions regarding such a  
15 risk using the assessment methodology that is  
16 referenced in paragraph 22?

17 A. As it relates to paragraph 22, that's  
18 correct.

19 Q. Have you used the expert assessment  
20 method that is described in paragraph 22 in  
21 planning the voluntary rerouting of the CSX that  
22 has occurred from the north-south line?

1 BY MS. MULLEN:

2 Q. Have you understood my questions in  
3 that context?

4 A. Well, CSX trains as opposed to cars.  
5 This computer model is used for the routing of the  
6 cars that go onto trains. We did look at the  
7 Norfolk Southern route that is available, and if  
8 our trains were to go over it, I believe we have  
9 an exhibit that shows that it is a further  
10 distance and requires them to go through two of  
11 their northern yards where they would have to be  
12 classified and handled.

13 Q. Is there any other starting point you  
14 could use that would reduce the mileage? In other  
15 words, you took certain examples.

16 A. No. That's the shortest one we could  
17 do through a map exercise. We don't have the NS  
18 network in our system, so we couldn't do it  
19 through a computer exercise.

20 So, for instance, if you went to  
21 Atlanta instead or some other large intersection,  
22 you can tell by the map that it is a longer

1 distance on the reroute. But from a map exercise  
2 that's the shortest route.

3 Q. Are you saying then that you selected  
4 as an example one that would have the shortest  
5 distance as opposed to one that would show the  
6 greatest?

7 A. For that particular example in the  
8 exhibit, yes.

9 Q. And that was done by -- that was a map  
10 exercise, not done by computer?

11 A. That's right.

12 Q. Does CSX accept any loaded banned  
13 material cars in the interline service?

14 A. Yes.

15 Q. And how do you ensure, and just  
16 generally, that the cars haven't been tampered  
17 with?

18 A. At an interchange or the next available  
19 yard, there is a requirement by the FRA and in our  
20 own safety manual to inspect the cars.

21 So, you know, before a train leaves  
22 any yard, that train, all the cars in that train

1 loads?

2 THE WITNESS: For loads, yes. You are  
3 right. So it would be 11,000 into 2 million for  
4 loads and empties.

5 BY MS. MULLEN:

6 Q. You are saying "right" as to what.

7 A. Mary Gay made the comment I had only  
8 looked at only the loaded car count. You should  
9 look at the loaded and empty car count.

10 That would be 11,400 cars going in  
11 terms of additional miles, 2,036,514 additional  
12 miles. So if you divide 11,400 into 2,036,514 you  
13 would have the additional miles required on  
14 average per car.

15 Q. Which comes out to be?

16 A. Well, by my math that would be  
17 slightly less than 200.

18 Q. That's 200 miles?

19 A. Yes.

20 Q. If rerouting of the banned materials  
21 increases your company's costs, what would be  
22 preventing you from increasing the rates to

1 are inspected. And then there are mileage  
2 requirements. After a car has traveled a certain  
3 number of miles, it is required to be inspected  
4 as well.

5 Q. But this is basically derived from  
6 industry standards?

7 A. FRA standards as applied on CSX. Each  
8 railroad has some latitude and creates their own  
9 operating rule book.

10 Q. What is the average extra distance  
11 that CSX would have to haul cars to comply with  
12 the D.C. ban?

13 A. Approximately 7,000 into 2 million  
14 miles.

15 Q. It is about two hundred miles, isn't  
16 it, according to your calculations?

17 MR. NATHAN: Where do you get that  
18 from?

19 THE WITNESS: The number is derivable  
20 from the two million additional miles and the  
21 6,939 cars.

22 MS. SPRAGUE: You are just looking at

1 shippers to cover the costs?

2 A. The marketplace and other factors.

3 Q. Have you done any sort of study to come  
4 up with a figure as to how much you would have to  
5 increase your rates to shippers?

6 A. No.

7 Q. The number of cars that we are talking  
8 about is a pretty small fraction of your overall  
9 traffic, is it not?

10 A. Statistically, yes.

11 Q. So based on the statistics that you  
12 currently have -- I don't know if this is your  
13 area -- can you come up with a ballpark figure as  
14 to what the cost would be to the shippers, to your  
15 customers?

16 A. That's a sales and marketing specialty  
17 and expertise. I have none of that.

18 Q. And I believe you testified earlier  
19 today that a cost analysis has not been done by  
20 your company.

21 A. That's right.

22 Q. Is one planned?

1 A. Not to my knowledge.  
 2 Q. Did you coordinate your evaluation of  
 3 the operational impacts of the act -- by that I am  
 4 talking about the District of Columbia Terrorist  
 5 Prevention and Hazardous Materials Transportation  
 6 Emergency Act of 2005, so we have that on the  
 7 record, and that's what I am referring to when I  
 8 say the act.  
 9 A. Me, too.  
 10 Q. We are on the same page.  
 11 -- with the Department of Homeland  
 12 Security?  
 13 MS. SPRAGUE: What was the question?  
 14 THE WITNESS: Try that again. I got  
 15 lost in the words.  
 16 BY MS. MULLEN:  
 17 Q. I understand.  
 18 Did you coordinate your evaluation of  
 19 the operational impact of the D.C. Act with the  
 20 Department of Homeland Security?  
 21 A. I did not. I don't know of any  
 22 coordination with them.

1 Q. You are unaware that anybody at your  
 2 company did any coordination with the Department  
 3 of Homeland Security?  
 4 MS. SPRAGUE: Regarding the impact,  
 5 Exhibit 2?  
 6 MS. MULLEN: Yes.  
 7 THE WITNESS: This is the first time  
 8 we shared this outside the company.  
 9 BY MS. MULLEN:  
 10 Q. Is there a reason why you didn't  
 11 coordinate this with the Department of Homeland  
 12 Security?  
 13 MS. SPRAGUE: Foundation. Why would  
 14 they?  
 15 THE WITNESS: Again, my mission was on  
 16 the implementation. It is not a requirement of  
 17 implementation.  
 18 BY MS. MULLEN:  
 19 Q. Do you have any agreements with the  
 20 Department of Homeland Security regarding  
 21 rerouting?  
 22 A. Not that I am aware of. You mean like

1 a written agreement? No, I don't know of any,  
 2 verbal or written.  
 3 MS. SPRAGUE: But you aren't involved  
 4 in any potential consultations?  
 5 THE WITNESS: No. I'm not.  
 6 BY MS. MULLEN:  
 7 Q. In your affidavit you make several  
 8 references to the safety record of your company.  
 9 Is it your understanding that the act  
 10 is directed towards accidental releases of banned  
 11 materials?  
 12 A. I don't know why the act was passed.  
 13 Q. You don't?  
 14 A. No.  
 15 Q. Let's look at paragraph 17. In  
 16 paragraph 17 of your affidavit you make a point  
 17 that unlike highways "railroads seldom have bypass  
 18 routes that enable them to route traffic around  
 19 metropolitan areas."  
 20 But railroads, do they not, routinely  
 21 exchange traffic with other railroads, and by this  
 22 means can send traffic on different routes?

1 MS. SPRAGUE: I object. I think you  
 2 are mixing apples and oranges.  
 3 MS. MULLEN: I think that's an  
 4 objection to form.  
 5 But if you understand the question,  
 6 please answer it.  
 7 THE WITNESS: We interchange traffic  
 8 with other railroads in carrying out our common  
 9 carrier obligations.  
 10 BY MS. MULLEN:  
 11 Q. With the interchange of traffic, what  
 12 is a railroad's ability to do this? Just give me  
 13 a thumbnail sketch as to how the interchange  
 14 practice operates.  
 15 A. We have designated locations that are  
 16 interchange locations between us and other  
 17 railroads. The interchange that occurs is a  
 18 way -- there are basically two kinds of  
 19 interchange: a physical interchange, and there is  
 20 kind of a billing interchange.  
 21 We always try to have those as close  
 22 together as possible. But, for instance, you can

1 place a car on an interchange track. It will have  
2 been physically interchanged even though the other  
3 railroad hasn't come and actually attached to that  
4 car. For billing purposes that may or may not be  
5 at that location in time.

6 The interchange triggers changes in  
7 the cost of the rent of the car, and it generally  
8 results in the end of one carrier's billing and  
9 the beginning of another carrier's billing.

10 Q. Is it a fair statement, then, to say  
11 that your company does this routinely?

12 A. Yes.

13 Q. It is done every day?

14 A. Yes.

15 Q. If it is done routinely, why is the  
16 interchange in traffic with Norfolk Southern so  
17 problematic for you?

18 A. It is done routinely as we carry out  
19 our common carrier obligation, which is serve the  
20 customer the way the customer said he wanted his  
21 traffic routed. In essence, CSX cannot simply  
22 interchange traffic with another without that

1 Q. If the regulations in the act were to  
2 allow for a permit, in other words, for the  
3 empties, in other words, they would have to be  
4 identified, but they don't have to be rerouted,  
5 does that make things easier for your company or  
6 not?

7 A. It reduces the impact of the reroute.

8 Q. And what is sort of the extent of that  
9 impact?

10 A. Again, it is in the table.

11 Q. And why don't you point that out to us.

12 A. The empty additional miles are about  
13 half of the 2 million. It is 947,712 additional  
14 empty miles that are required to comply with the  
15 act out of a total additional annual miles of  
16 2,036,514.

17 Q. So that is essentially 50 percent?

18 A. Slightly less, yes.

19 Q. And based on that, the number of car  
20 miles would total what? 2000 for the year 2004?

21 A. Yes, October of 2003, 12 months, it is  
22 October of 2004. We have said in '04 because that

1 customer's directive.

2 Q. Has there been an assessment of your  
3 customers as to their opinion about what this  
4 change would be?

5 A. Not that I am aware of.

6 Q. So you don't know if the act were  
7 effective that this would in any way result in  
8 customer dissatisfaction?

9 A. We have the letters of some customers  
10 who are concerned about it within the exhibits  
11 that are filed, if I remember right. But an  
12 analysis -- I am not aware of an analysis of  
13 that.

14 Q. What is the gist of the complaint with  
15 the customers?

16 A. The inefficiency, the time in transit.

17 Q. Is it fair to say time and money? Is  
18 that what it boils down to, time and then money  
19 for the customer?

20 A. I believe one or two of them talk about  
21 safety as well. I would say those three things,  
22 yes.

1 12 months would give you seasonality. It will be  
2 approximately that, but we don't have November and  
3 December actual data at this point.

4 Q. Let's look at paragraph 23 of your  
5 affidavit. You state that "The longer the route,  
6 the greater the risk of a release while in  
7 transit."

8 Why is that?

9 A. The statistics of handling a car safely  
10 from origin to destination for these kinds of  
11 products is quite high. But every additional mile  
12 adds inherent risk and especially additional  
13 handling adds inherent risk.

14 Basically a handling requires you to  
15 change the car out from one train, place it  
16 someplace, so you are uncoupling from the train on  
17 both ends for HAZMAT materials. You are coupling  
18 it to a locomotive. You are removing, placing it  
19 again and recoupling it to another train.

20 Q. So intuitively the risk would  
21 increase. Do you have data to back this up as  
22 well?

1 A. I think it is common sense.  
 2 Q. Right. Intuitively you would think  
 3 this would be the case. But I am just wondering  
 4 if you have hard data to back that up.  
 5 A. I have not done a statistical analysis  
 6 of incidents per mile handled.  
 7 Q. And the length of a route doesn't  
 8 correlate to the risk of, say, a terrorist  
 9 attack?  
 10 A. Why not?  
 11 Q. Well, how would it?  
 12 MS. SPRAGUE: I think this is getting  
 13 beyond -- have you done a study of this?  
 14 THE WITNESS: We have not. I don't  
 15 know.  
 16 BY MS. MULLEN:  
 17 Q. So your answer is you don't know --  
 18 A. I don't know.  
 19 Q. -- if the length would have an impact  
 20 or be a factor in a circumstance where you have a  
 21 terrorist attack?  
 22 A. I have no concept of how to evaluate a

1 terrorist attack risk.  
 2 Q. How does the length of a route affect  
 3 the probability of a nonaccidental release?  
 4 MS. SPRAGUE: Are we back to terrorist  
 5 attacks? I think there was something else.  
 6 MR. NATHAN: Nonaccidental release.  
 7 MS. SPRAGUE: You mean a purposeful  
 8 release?  
 9 MS. MULLEN: A nonaccidental release.  
 10 Something intentional.  
 11 THE WITNESS: I have no idea. Common  
 12 sense says there is more opportunity.  
 13 BY MS. MULLEN:  
 14 Q. Are you aware of any provisions of the  
 15 Federal regulations that cover railroads, how they  
 16 in any way minimize the risk of nonaccidental  
 17 releases of hazardous materials?  
 18 A. Only generally. We have dealt in my  
 19 group with Homeland Security and TSA in passenger  
 20 operations, so there are, you know, drills,  
 21 training, pamphlets, materials on the computer,  
 22 materials in posters, and direct communication,

1 you know, on that subject generally and as it  
 2 relates to the passenger operations. So I know  
 3 the level of activity we have of that.  
 4 Q. Do you know of any specific regulation  
 5 that is applicable to railroads that deals  
 6 directly with nonaccidental releases?  
 7 MS. SPRAGUE: I object. I think this  
 8 is not -- John can explain if this is his area of  
 9 responsibility within the company. But I don't  
 10 believe that it is. Other people are responsible  
 11 for that.  
 12 MS. MULLEN: That may be, and he can  
 13 certainly tell me so, if he doesn't have a  
 14 knowledge base for a particular question.  
 15 THE WITNESS: I don't.  
 16 BY MS. MULLEN:  
 17 Q. You don't?  
 18 A. I do not.  
 19 Q. Thank you.  
 20 In paragraph 25, you state that the  
 21 dwell time in yards would increase risk. Again,  
 22 intuitively one might think that to be the case,

1 but do you have hard data that supports that  
 2 assertion?  
 3 A. In terms of accidental releases, they  
 4 are far more frequent in yards than in transit  
 5 between yards.  
 6 Q. How do you know that?  
 7 A. We do have data on our incidents.  
 8 Q. Can you provide that data?  
 9 MS. SPRAGUE: I believe that these  
 10 are matters the United States has spoken to, and  
 11 this information is available, I think, from  
 12 FRA. It is at the level of common knowledge in  
 13 the industry.  
 14 MS. MULLEN: So the data would be  
 15 available to anyone?  
 16 MS. SPRAGUE: Yes, I believe the  
 17 Department of Transportation keeps all these  
 18 statistics and this goes into their decision of  
 19 regulating, a very integral part of what they  
 20 do.  
 21 MS. MULLEN: Thank you.  
 22 BY MS. MULLEN:



1 sorry -- October of 2003 to October of 2004.  
 2 Q. And that's captured in Exhibit 2?  
 3 A. Yes.  
 4 MS. SPRAGUE: I think we are talking  
 5 about two different times. You mean on their  
 6 system?  
 7 MS. MULLEN: Yes. This is specific  
 8 only to the District of Columbia.  
 9 MS. SPRAGUE: Right.  
 10 BY MS. MULLEN:  
 11 Q. So you are answering --  
 12 A. Right. October to October is what I  
 13 gave you for Exhibit 2. And, frankly, I don't  
 14 recall where the 2004 numbers came from. I  
 15 believe it is 12 months in 2004, January to  
 16 December. But I'm not 100 percent sure. I just  
 17 don't remember exactly the database we pulled  
 18 these from.  
 19 Q. But you think it was a calendar year?  
 20 (Witness and counsel conferring.)  
 21 THE WITNESS: That's what I was  
 22 assuming when I answered historically. But I just

1 don't recall. I believe that these data in this  
 2 exhibit and in the affidavit coincide, October to  
 3 October. But at this particular point I just  
 4 can't remember, I'm sorry, which of these.  
 5 MS. SPRAGUE: You are referring to  
 6 paragraph 19 in your affidavit?  
 7 BY MS. MULLEN:  
 8 Q. You are referring to paragraph number  
 9 19 in the affidavit that you prepared?  
 10 A. Right.  
 11 Q. Which corresponds with Exhibit 2?  
 12 MS. SPRAGUE: No.  
 13 THE WITNESS: No. I think they were  
 14 taken from the same database.  
 15 MS. MULLEN: That's what I mean.  
 16 THE WITNESS: Same October to October  
 17 database. I just am not 100 percent certain of  
 18 that. Thinking back on that, I can't recall it  
 19 was exactly that. I think that's what it is.  
 20 BY MS. MULLEN:  
 21 Q. You are telling us you believe it is  
 22 the same database information that is captured in

1 Exhibit 2, but you can't be absolutely certain?  
 2 A. Yes. It was just a failure of memory.  
 3 I'm sorry.  
 4 Q. Let's look at Exhibit 2. You have  
 5 under annual shipments the Virginia Avenue tunnel  
 6 reroute only, right?  
 7 A. Yes.  
 8 Q. And that's east-west?  
 9 A. That's north-south. I-95 or  
 10 north-south.  
 11 Q. That's your north-south?  
 12 A. Yes.  
 13 Q. Then the column below that is the  
 14 east-west?  
 15 A. The row that says Virginia Avenue and  
 16 capital Metro sub-reroute is both the north-south  
 17 and east-west.  
 18 Q. It captures both?  
 19 A. Yes.  
 20 Q. It was east-west, north-south annual  
 21 shipments in the D.C. area?  
 22 A. That's correct. Of the commodities

1 under the D.C. Act.  
 2 Q. And does the 6,939 represent the  
 3 annual shipments before voluntary rerouting?  
 4 A. Before voluntary, yes. In other  
 5 words, the Virginia Avenue reroute is a subset of  
 6 the 6,939. So the impact, so to speak, of adding  
 7 the east-west and the loads and the empties is  
 8 about, depending on which column you choose, five  
 9 to six times the impact of the voluntary reroute.  
 10 Q. Tell me if this is a correct  
 11 statement. That in 2004 the number of cars,  
 12 loaded cars that traveled through the District  
 13 was ten.  
 14 A. No. No.  
 15 Q. What do the ten cars that you  
 16 referenced earlier represent?  
 17 A. Ten cars that I referenced earlier  
 18 represent from the period of May of '04 to  
 19 January of '05 the number of loaded cars that  
 20 moved on the I-95 north-south route that were  
 21 subject to the D.C. HAZMAT law, but not covered  
 22 by our voluntary reroute.

1 MS. SPRAGUE: But the law was not in  
 2 effect. Within the class of materials that were  
 3 in January incorporated in the act?  
 4 THE WITNESS: Right.  
 5 MS. MULLEN: Thank you for making that  
 6 clear.  
 7 BY MS. MULLEN:  
 8 Q. I know you described capacity, and I  
 9 know experts in your area describe capacity as  
 10 being something illusive, and somehow it is  
 11 difficult for the layman to understand.  
 12 But when you are talking about capacity  
 13 or at least in the way you have discussed capacity  
 14 today, I believe you would describe the capacity  
 15 of your company as being somewhat stressed?  
 16 A. Yes.  
 17 Q. Is that correct?  
 18 A. Not on every route. Not in every yard  
 19 location. But we are very near capacity in  
 20 several of our major routes and certainly very  
 21 near capacity everywhere in the Washington, D.C.  
 22 area.

1 Q. And I don't know if this question makes  
 2 sense, but when you increase the number of your  
 3 carloads, you are increasing capacity, are you  
 4 not?  
 5 A. No.  
 6 Q. No. When you are increasing carloads,  
 7 what does that mean in terms of the industry?  
 8 That you have just expanded the number of cars so  
 9 you can carry more materials? That doesn't give  
 10 you greater capacity?  
 11 A. No.  
 12 MS. MULLEN: I think he is answering  
 13 the questions. You keep answering for him.  
 14 THE WITNESS: The cars are the demand  
 15 that is put against the capacity. The capacity  
 16 is relatively static or fixed. But it has got  
 17 many components, many variables that create your  
 18 kind of current capacity state.  
 19 The cars, additional cars, you know,  
 20 absent some capital investment, absent some change  
 21 in the operation to take other traffic off, the  
 22 addition of just cars to a static network is to

1 decrease capacity.  
 2 BY MS. MULLEN:  
 3 Q. It is my understanding that the  
 4 industry sometimes gives awards for certain  
 5 railroads when they increase the number of  
 6 carloads. Is that correct?  
 7 A. I'm not familiar with that.  
 8 Q. Let's go to Exhibit 2. Does Exhibit 2  
 9 take into consideration -- that's your analysis.  
 10 Is this the only analysis that has been prepared?  
 11 A. That's right.  
 12 Q. Does that take into consideration the  
 13 added days, miles and the handlings on the CSX  
 14 system only?  
 15 A. Yes.  
 16 Q. So it doesn't give any attention to  
 17 the possibility of reducing route links through,  
 18 say, for example, interchange?  
 19 A. That's correct. But, again,  
 20 interchange of these commodities is not available.  
 21 Q. And why is that?  
 22 A. Well, I have been trying to describe on

1 the interchange part it is that interchange is not  
 2 a voluntary exercise between CSX and NS, for  
 3 instance. We could not simply interchange these  
 4 cars to the Norfolk Southern.  
 5 The Norfolk Southern would have to  
 6 agree with us to want to take the traffic, and I  
 7 think they said they would not. And the customer  
 8 would have to agree both with us and with the  
 9 Norfolk Southern simultaneously that it wanted  
 10 that traffic to move that way, and we are  
 11 prohibited from simply dropping these cars on the  
 12 Norfolk Southern. That's not allowed.  
 13 Q. Let's say assuming for the movement  
 14 that Norfolk Southern would accept the cars. What  
 15 amount of time would it take to respond to its  
 16 rerouting? Let's say they would agree. The  
 17 implementation plan would take how much time?  
 18 A. About the same amount of time.  
 19 MR. NATHAN: You have ignored his  
 20 answer that the shippers have to request and  
 21 agree to that.  
 22 MS. MULLEN: I haven't ignored it. Do

1 you have an objection?

2 MR. NATHAN: Yes, I do. You asked one  
3 half of his answer. How could he answer that  
4 question?

5 MS. MULLEN: Is your objection as to  
6 time?

7 MR. NATHAN: You are mischaracterizing  
8 his testimony.

9 BY MS. MULLEN:

10 Q. Did I mischaracterize your testimony?

11 A. I don't think I understand the  
12 question then.

13 Q. How much time would it take to do an  
14 implementation plan if, in fact, the Norfolk  
15 Southern agreed and you don't have any dissent  
16 from your customers?

17 A. And the customers insisted on it. The  
18 customers have to direct it. They have to direct  
19 us to do it. They have to direct the Norfolk  
20 Southern to do it.

21 Is that the list of assumptions for  
22 the question?

1 A. The efficient route is the route that  
2 minimizes the equations of car miles and car  
3 handlings. Here we are in 31; it looks like.

4 Q. That's correct. It is in paragraph 31  
5 where "least disruptive" is.

6 A. That's the same thing. Efficient.

7 Q. As efficient?

8 A. Yes.

9 Q. In doing your analysis, you limited  
10 your analysis only to the CSX rail network. Is  
11 that a correct statement?

12 A. Yes.

13 Q. But isn't it true that you do  
14 interchanges with other railroads all the time?

15 A. Where we have agreements and where the  
16 customers require it, we do that. An example is  
17 from Los Angeles to New Jersey requires a  
18 railroad that operates to Los Angeles and one  
19 that operates to New Jersey. No one railroad  
20 does both of those. An interchange is required.  
21 It generally takes place in Chicago.

22 Q. The Norfolk Southern owns and utilizes

1 Q. Yes. Assuming everyone is in  
2 agreement.

3 A. It would take about the same amount of  
4 time to do that as to do the reroute.

5 In other words, you would have to  
6 change the routing of all of the cars that would  
7 be involved across all of the yards they could  
8 possibly hit.

9 Q. How much time is that? You say "the  
10 same amount of time."

11 A. That three to four weeks.

12 Q. I believe you have referenced "least  
13 disruptive alternative route" in your affidavit.

14 What do you mean when you are saying  
15 "least disruptive alternative route"?

16 A. I don't recall exactly the sentence.  
17 Do you recall where it is?

18 Q. I believe it is mentioned in several  
19 paragraphs.

20 A. We talk about the efficient route.

21 Q. Then let's use "efficient" instead of  
22 "least disruptive."

1 rail corridors, doesn't it, where banned materials  
2 could be routed around the District?

3 MS. SPRAGUE: Objection. He said  
4 legally they can't.

5 BY MS. MULLEN:

6 Q. Why do you say legally Norfolk Southern  
7 doesn't own or utilize rail corridors where banned  
8 materials can be routed around the District? On  
9 what do you base that opinion?

10 A. CSX has a common carrier obligation to  
11 deliver its traffic per its customer's  
12 instructions. We have no instructions from any  
13 customer to do that, and the Norfolk Southern has  
14 indicated they would not do it either. So there  
15 is no concurrence between us and the Norfolk  
16 Southern. There is no concurrence between us and  
17 the shipper. There is no concurrence between the  
18 shipper and Norfolk Southern. So there is no  
19 mechanism that allows, legal or otherwise, that  
20 allows that to happen that I am aware of.

21 Q. And you seem to have misunderstood the  
22 question because it was not what you would do. It

1 I think there is, though, within the  
2 exhibits "Skip" Elliott's testimony at the  
3 hearings in D.C., and they talked to our security  
4 measures, and what steps were taken and why.

5 Again, it all stems from a discussion  
6 at the Federal level of what are the things we  
7 should be protecting ourselves and the public  
8 against.

9 Q. Let's turn to paragraph 55 of your  
10 affidavit. In paragraph 55 you referenced  
11 shifting transportation burdens to other  
12 communities.

13 Could you please tell us what you mean  
14 by that. Be specific as to what do you mean by  
15 "transportation burden."

16 A. Right. Okay.

17 Perhaps the easiest way to describe  
18 that is to simply look at a couple of the  
19 exhibits where we show the reroute that occurs as  
20 a result of the D.C. ordinance on specific  
21 movements of certain commodities. So the first  
22 of those maps is in Exhibit D.

1 What would occur in this specific  
2 movement that would normally come up through  
3 Richmond and go towards Philadelphia is that this  
4 traffic would be rerouted so that the cities of  
5 Asheville, Cincinnati, Cleveland, Erie, Buffalo,  
6 Rochester, Syracuse, Albany, all of northern New  
7 Jersey places like Newark and Trenton, if you were  
8 to draw a 2.2 mile corridor from that, you would  
9 also include all of Manhattan and Philadelphia and  
10 Baltimore -- not Baltimore -- but Philadelphia on  
11 the north side as opposed to Philadelphia on the  
12 south side.

13 Again, the inherent risk of additional  
14 miles and handlings is transferred from the short  
15 and direct route to a much more circuitous and  
16 much lengthier route; and even though this is  
17 handled very safely day in and day out, obviously  
18 the more handlings, the more miles you put them  
19 on, the more exposure everybody has.

20 Q. You talked about the burden, I guess,  
21 on the northern New Jersey and New York City area,  
22 in that metropolitan area, right?

1 A. Yes.

2 Q. How many cars would have to be rerouted  
3 there?

4 A. This is an example of one of the  
5 reroutes that is created in this table. It is  
6 described in the discussion.

7 Q. The number of cars?

8 A. The movement. The customer and origin  
9 and destination.

10 Q. If this question makes sense, can you  
11 tell me how many cars would have to be rerouted  
12 there?

13 A. We did not sort the data that way.

14 Q. Do you know exactly where they would  
15 run?

16 A. I do not. I believe that data may be  
17 available. It is not the way we sorted it. We  
18 did not look at this data by route it would take.

19 Q. Is there a reason why you didn't sort  
20 the data by number of cars?

21 A. All we are concerned about is the  
22 inherent inefficiency and that's described in the

1 chart. There is no advantage from what we do to  
2 look at where that inefficiency goes by car.

3 Q. So what can you glean from knowing the  
4 number of cars? What does that tell you?

5 MS. SPRAGUE: The number of cars  
6 subject to the reroute on Exhibit 2?

7 MS. MULLEN: Yes.

8 THE WITNESS: The purpose of Exhibit 2  
9 is to analyze what is the impact of the act.

10 MS. MULLEN: Yes.

11 THE WITNESS: And the number of cars,  
12 the extra miles and the extra handlings, that's  
13 the essence of the impact. I don't know how to  
14 get more elemental than that. That is what the  
15 impact is.

16 BY MS. MULLEN:

17 Q. With me you should be as elementary as  
18 possible. My question though is, I don't  
19 understand why you wouldn't count the number of  
20 cars in preparing the analysis. Why wouldn't you  
21 sort the data as to the number of cars?

22 MR. NATHAN: You have the number of

# **Exhibit 31**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

- - - - -	x	
	:	
CSX TRANSPORTATION, INC.,	:	
	:	
Plaintiff,	:	
	:	
vs.	:	Civil Action No1
	:	1:05-DV-00338
ANTHONY A. WILLIAMS and	:	
DISTRICT OF COLUMBIA,	:	Hon. Ellen Segal
	:	Huvelle
Defendants.	:	
	:	
- - - - -	x	

Washington, D.C.  
Friday, March 4, 2005

The deposition of JOSEPH C. OSBORNE, JR., called for examination by counsel for Defendants, pursuant to notice, in the offices of the Attorney General for the District of Columbia, Sixth Floor, 441 4th Street, N.W., Washington, D.C., convened at 9:12 a.m., before Emma N. Lynn, a Notary Public in and for the District of Columbia, when were present on behalf of the parties:

1 Does NSR have established routes that  
2 routinely take it over lines that NSR has a right  
3 to travel over pursuant to trackage rights  
4 agreements?

5 A. You say "take it over." You mean take  
6 trains over? Is that what you mean?

7 Q. It was poorly worded, but to operate  
8 over.

9 A. Norfolk Southern has certain train  
10 movements that utilize trackage rights, to use a  
11 general term, on a frequent basis.

12 Q. In paragraph 7, again you refer to  
13 "366,000 shipments of hazardous materials during  
14 2004."

15 Is that calendar year 2004?

16 A. That's correct.

17 Q. How many shipments of material did NSR  
18 transport during 2004?

19 A. Would you say the question again.

20 Q. How many shipments of any material did  
21 NSR transport in 2004?

22 A. I don't know.

1 Q. Do you know how we could obtain that  
2 data? Is it a matter of public record, a filing  
3 with any Federal agency?

4 A. I believe it is a matter of public  
5 record.

6 Q. And what would cause you to believe  
7 that?

8 A. For instance, in our annual report, we  
9 describe our overall results for calendar year  
10 2004. I also believe there are regulatory filings  
11 that we do that refer to this.

12 Q. Your annual report, what is that?

13 A. It is a report of our financial results  
14 as a company, a report that we make to our  
15 shareholders every year.

16 Q. Have you reviewed the 2004 annual  
17 report?

18 A. No. I do not believe it is available  
19 yet.

20 Q. Did any your supervisors, including Mr.  
21 Lawson, review this affidavit before you signed  
22 it?

1 A. I'm not sure.

2 Q. Just referring to chlorine and liquid  
3 propane gas, in 2004 did NSR ship either by itself  
4 or through interchange agreements chlorine and  
5 liquid propane gas through the District of  
6 Columbia?

7 MR. MOATES: I am not going to object,  
8 but railroads don't ship. Shippers ship.  
9 Railroads transport. I think it would help if you  
10 use that terminology.

11 BY MR. CASPARI:

12 Q. He has objected to the form of the  
13 question. Do you understand the question now?

14 A. I understand the question.

15 To my knowledge, no.

16 Q. And why, if you know?

17 A. Why did Norfolk Southern not transport?

18 Q. Why not?

19 A. The main reason is that the flow of our  
20 traffic that you are describing, chlorine, LPG,  
21 doesn't move, doesn't naturally move over that  
22 route.

1 Q. Mr. Osborne, has it ever moved through  
2 the D.C. route?

3 A. That I don't know.

4 Q. How does NSR move the chlorine and  
5 liquid propane gas on its rail network north and  
6 south of D.C.?

7 A. The answer I would give is kind of  
8 complicated. But if there was such traffic that  
9 moved north-south, and to help your question, in a  
10 routing that was somewhat parallel to what CSX is  
11 doing, our routing would be more along the lines  
12 of a Roanoke, Virginia, Lynchburg, Virginia,  
13 Hagerstown, Maryland, Harrisburg, Pennsylvania,  
14 type of routing.

15 And why it is complicated is it depends  
16 upon where it is going to go; that is, what is the  
17 ultimate destination of the particular commodity.

18 MR. CASPARI: Can you mark this. This  
19 might help. I don't know.

20 (Osborne Exhibit No. 3 was  
21 marked for identification.)

22 BY MR. CASPARI:

1 called Traffic World that talked about not only  
2 the actions by D.C., but also the interest by at  
3 least some members of the District to encourage  
4 this among other municipalities.

5 Q. Are you aware of whether any of those  
6 other municipalities have introduced an ordinance  
7 similar to D.C.?

8 A. As to the specifics, I am not aware. I  
9 am just aware of the general intent and thrust of  
10 what they are trying to do.

11 Q. Are you aware of any internal NSR  
12 studies or external studies that evaluate --  
13 strike that.

14 Are you aware of any studies that  
15 identify or correlate increased dwell time in rail  
16 yards to increased probability of nonaccidental  
17 releases of hazardous materials?

18 A. I am not aware of specific studies. I  
19 am aware that as a result of risk analysis that we  
20 have looked at what is the safer way and,  
21 therefore, the lower risk way of handling  
22 commodities like this. And in general the

1 is your testimony that this risk analysis was  
2 conducted by NSR?

3 A. Among others. I say this is by NSR.  
4 The rail industry is quite active in trying to  
5 find ways to reduce risk, and there are a number  
6 of programs that are done to do that. So this  
7 isn't just one type of analysis. This is an  
8 ongoing type of study effort to find ways to  
9 reduce risk.

10 Q. And what I am interested in is if you  
11 have a particular study or analysis that you can  
12 identify that identifies increased dwell time with  
13 the increased risk of a terrorist or criminal act.

14 A. I am not personally aware of such a  
15 study. I just know that in the course of this  
16 business that I am in that this is a commonly  
17 understood approach, that is driven upon studies  
18 that have been done to try to affect or try to  
19 reduce the level of risk.

20 Q. Are you aware of any studies that  
21 equate increased car mileage, increased routed  
22 mileage with an increased risk of a terrorist

1 conclusion is to reduce handlings and to route  
2 traffic by the most efficient service route.

3 Q. The risk analysis is in terms of  
4 accidental release. Is that a fair statement?

5 A. I'm not sure what you mean by  
6 "accidental release."

7 Q. Accidents versus intentional acts of  
8 criminals or terrorists.

9 A. Well, aside from criminal type things,  
10 criminal type events that I believe we can agree  
11 we understand, this included analysis of releases  
12 of hazardous materials and the analysis led to  
13 certain conclusions about what is a lower risk  
14 method of handling commodities than ways that had  
15 been done before, and tried to make changes that  
16 have the effect of reducing those levels of  
17 risk.

18 Included in there is, again, less  
19 handlings, more direct, more efficient routings,  
20 less time sitting at various locations on a rail  
21 line.

22 Q. Just so I understand your testimony, it

1 attack?

2 A. Could you say the question once again.

3 Q. Are you aware of a risk analysis study,  
4 report, that equates an increase in car miles or  
5 route miles, however it is identified in the  
6 railroad industry, with an increased risk of  
7 terrorist attack on a hazardous material car?

8 A. I am not personally aware of such a  
9 study.

10 Q. Are you aware of any study that  
11 correlates an increased number of handlings with  
12 an increased risk of a terrorist attack on a  
13 hazardous material car?

14 A. I am not personally aware of any such  
15 study.

16 Q. Paragraph 14, substantial volume -- in  
17 paragraph 15 you indicate "1.5 million loaded and  
18 empty rail cars" -- strike that.

19 Does Norfolk Southern transport  
20 hazardous materials over this route, either the  
21 one that was identified or the one you have  
22 identified with the blue pen in Osborne 3?



1 A. To my knowledge Norfolk Southern does  
2 handle hazardous materials over -- chemical  
3 shipments over this route.

4 Q. And do those shipments include chlorine  
5 and liquid propane gas?

6 A. I believe the answer is yes. Yes.

7 Q. Are you aware of the number of  
8 shipments I just referred to for, say, calendar  
9 year 2004?

10 A. No, I am not. I am not aware  
11 specifically here.

12 Q. Do you know how NSR would compile that  
13 data?

14 A. Yes, I do.

15 Q. How would they?

16 A. It would be a combination of my  
17 chemicals group, plus our operations support  
18 group, running an analysis through using our  
19 database to find out what hazardous materials of  
20 what type and what volume moved over this  
21 particular corridor.

22 Q. To your knowledge has that data been

1 trackage rights over that portion of NSR's rails?

2 A. To my knowledge, no.

3 Q. How many trackage rights agreements are  
4 there between NSR and CSX?

5 A. I do not know.

6 Q. In paragraph 18 we have addressed this  
7 a little bit. The "feasible alternative routing"  
8 that is mentioned in the third line there, and  
9 correct me if I am wrong, I believe you  
10 established before that you are not exclusively  
11 referring to what is identified as Norfolk  
12 Southern's rails in Osborne 3 in paragraph 18.

13 A. Yes, I said earlier that without  
14 knowing the details I wouldn't be sure.

15 Q. Can you identify any service  
16 disruptions on Norfolk Southern's rails,  
17 particularly as identified in Osborne 3, in May of  
18 2004 as a result of the CSX's voluntary rerouting?

19 A. Voluntary?

20 Q. Rerouting.

21 A. Let me ask you to repeat the question.

22 Q. Sure.

1 compiled for purposes of this case or your  
2 affidavit?

3 A. To my knowledge, no.

4 Q. For that portion of NSR rails that  
5 other companies such as CSX has trackage rights  
6 to, how was NSR apprised of what commodities those  
7 other companies are shipping over NSR's rails?

8 A. I'm not sure. That is, I am not sure  
9 how NS knows. I just know that NS is required by  
10 law to know what is in the train consist that  
11 another carrier would use using trackage rights.

12 Q. What, if any, limitations are placed on  
13 the company receiving trackage rights in terms of  
14 what commodities it could transport over NSR's  
15 rails?

16 A. It depends upon the purposes and the  
17 details of the specific trackage rights agreement.

18 Q. Does CSX have trackage rights over this  
19 portion of Norfolk Southern's rail identified in  
20 Osborne 3?

21 A. To my knowledge, no.

22 Q. Does any other rail company have

1 I forget what your answer was, whether  
2 you knew CSX was voluntarily rerouting starting  
3 May of 2004.

4 A. Yes.

5 Q. Were you aware of that?

6 A. Yes, I had said earlier that I was  
7 aware through press reports that CSX had done some  
8 voluntary rerouting, I believe in conjunction with  
9 the discussion with the Department of Homeland  
10 Security, around Washington, D.C. as a temporary  
11 measure. I think, without citing the specific  
12 press reports, that's what I understood.

13 Q. And you are not aware of whether they  
14 are still continuing to voluntarily reroute or  
15 not?

16 A. Right, I am not aware.

17 Q. My question is, when they first began  
18 to voluntarily reroute, can you identify any  
19 service disruptions to Norfolk Southern's rails?

20 A. None that I am aware of. But, of  
21 course, I don't know what CSX did.

22 Q. But you are not aware as group vice

1 that I pointed out here on Exhibit 3, but, again,  
 2 it is a function of the specifics about the  
 3 traffic that would be rerouted. You had indicated  
 4 that this Exhibit 3 came from CSX. And if this  
 5 was the characteristic of the traffic in question,  
 6 this would be an example as I showed on Exhibit 3  
 7 of the diversion, what would have to happen to the  
 8 traffic.

9 Q. So for purposes of paragraph 18, you  
 10 are referring to these Norfolk Southern lines on  
 11 Osborne No. 3?

12 A. No. I don't want to be -- I don't want  
 13 to say that there is a direct application. I am  
 14 just saying that to the extent that we know about  
 15 the traffic, as inferred by this map that came  
 16 from CSX, it would seem to me that this map would  
 17 illustrate what the diversion would be, as I said  
 18 in 18.

19 But I qualified it by saying I don't  
 20 know the origin-destination points of the traffic  
 21 that is involved, so I can't speak authoritatively  
 22 that this would be the solution. It is likely

1 You told me you are not aware of the  
 2 amount of cars that CSX is voluntarily rerouting.

3 A. That's correct.

4 Q. Are you aware of the volume of cars  
 5 that CSX would have to reroute if the D.C.  
 6 ordinance was enforced?

7 A. I do not know the specific volume or  
 8 number of loads and empties,  
 9 loaded rail cars and empty rail cars, that would  
 10 have to be rerouted if this ordinance was  
 11 enforced.

12 Q. Having said that, I don't glean from  
 13 your affidavit that you are stating that a service  
 14 disruption would, in fact, occur if the cars were  
 15 rerouted over Norfolk Southern's lines. Is that a  
 16 fair statement?

17 A. What I am saying in my affidavit is  
 18 that by forcing CSX to reroute traffic as  
 19 described in the D.C. ordinance, the likelihood of  
 20 congestion, problems with fluidity, the reference  
 21 I made earlier in section 10 of my affidavit,  
 22 would increase appreciably.

1 that for the most part this would be a solution.

2 Q. And correct me if I am wrong, but it  
 3 may be part of the solution. There may be other  
 4 Norfolk Southern lines that would have to be used  
 5 to reroute. Is that your testimony?

6 A. It could be, yes.

7 Q. So we are not dealing with these lines  
 8 exclusively?

9 A. Again, absent knowledge about the  
 10 specifics of the traffic, but in general, yes.

11 Q. I think I understand.

12 To your knowledge how many cars are  
 13 currently being rerouted under the voluntary  
 14 reroute plan by CSX around D.C.?

15 A. I have no knowledge of that.

16 Q. Correct me if I am wrong. Then having  
 17 no knowledge of that, you are not contending in  
 18 this affidavit that a service disruption would, in  
 19 fact, occur if CSX was allowed to reroute using  
 20 Norfolk Southern's lines?

21 A. Could you say that question again.

22 Q. Sure.

1 Q. The likelihood?

2 A. Yes.

3 Q. Have you done any computer modeling or  
 4 analysis to determine what the impact would be on  
 5 NSR operations if CSX rerouted those materials on  
 6 NS lines?

7 A. No, I haven't. Not that I am aware of.

8 Q. My question was you personally. You  
 9 didn't conduct any computer analysis?

10 A. No, I did not.

11 Q. Are you aware of any computer analysis  
 12 conducted by NSR in that regard?

13 A. No, I'm not.

14 Q. In order to conduct a computer analysis  
 15 on -- let me ask this.

16 Have you ever conducted a computer  
 17 model analysis regarding the flow of traffic over  
 18 NSR's rail lines?

19 A. Not that I am aware of.

20 Q. Do you know who in NSR would be  
 21 responsible for conducting such computer analysis?

22 A. If something like that were to be done,

1 it would be conducted by our network operations  
2 group based in Atlanta.

3 Q. In terms of your affidavit you said the  
4 likelihood would increase. Do you have a  
5 percentage of the likelihood of service  
6 disruption?

7 A. No, I don't.

8 MR. CASPARI: If I can take a  
9 five-minute break.

10 (Recess.)

11 MR. CASPARI: Back on the record.

12 BY MR. CASPARI:

13 Q. Mr. Osborne, I was asking you questions  
14 about the likelihood of service disruptions in the  
15 event of a CSX reroute.

16 In order to conduct an analysis of the  
17 likelihood of service disruptions, what type of  
18 factors does NSR need in order to evaluate that?

19 A. First, you know, we would start -- we  
20 would likely start by looking at our experience.  
21 For instance, I cited the example of the effect of  
22 the hurricanes that happened this past year in the

1 an analysis that says we know what happens when  
2 there are disruptions. We know generally what  
3 causes the disruptions, and given the potential  
4 snowball effect that would accompany the D.C.  
5 actions, we can project how this would harm  
6 Norfolk Southern, harm our customers, and affect  
7 the fluidity, the ability of the North America  
8 rail network to continue functioning.

9 Q. If you don't know the number of cars  
10 affected, number of CSX cars affected, how can you  
11 evaluate the impact on Norfolk Southern's rails?

12 A. I can evaluate it because I am aware  
13 that in general -- this is publicly available  
14 information -- CSX handles a larger volume of  
15 chemical or hazardous materials type shipments  
16 than Norfolk Southern.

17 I also know that this corridor that is  
18 affected by the D.C. ordinance is one of CSX's  
19 main corridors. I don't know specifically what  
20 moves -- I'm sorry -- what chemical or hazardous  
21 materials shipments move in those corridors, but I  
22 made an assumption, and that is why I said what I

1 southeast portion of the United States. I also  
2 made reference in my affidavit to the service  
3 disruptions that happened with the UP-SP merger.  
4 That forms of the foundation for why we believe  
5 there is likely to be service disruptions.

6 Then moving into details, we would in  
7 general kind of look at a couple of things. I am  
8 speaking for Norfolk Southern. We would need to  
9 see what traffic was affected. We would need to  
10 know the effect that this would have on CSX,  
11 because the effect on their operation affects our  
12 operation.

13 We would also need to know from that  
14 analysis if there were also effects on other  
15 carriers beside Norfolk Southern and CSX. And we  
16 would also have to take into consideration the  
17 effect that this event, that is, the actions by  
18 Washington, D.C., would have in terms of other  
19 municipalities taking like, similar actions, some  
20 of which we are becoming aware of as we speak.

21 So I don't want to characterize this as  
22 an all inclusive type of analysis. It is more of

1 said in this affidavit, that it is a significant  
2 number, and that has the effect of presenting the  
3 likelihood of service disruptions and congestion  
4 that is involved.

5 Q. The service disruptions that you speak  
6 of, it is not guaranteed that service disruptions  
7 will occur. Is that a fair statement?

8 A. I would answer it this way. There are  
9 other variables that are embedded in this that  
10 move the conclusion closer to a guarantee than  
11 not. And one of the biggest variables is the  
12 effect of other municipalities adopting the same  
13 kinds or, I'm sorry, the general thrust of the  
14 D.C. ordinance that we are here for today.

15 Q. You mentioned harm to customers. How  
16 is that quantified or evaluated?

17 A. When customers make arrangements for  
18 rail transportation in the chemical or the  
19 hazardous material world, those customers own not  
20 only the product that is in the rail car, but they  
21 either own or lease the rail cars. When they make  
22 their decision about routing traffic over a rail

1 A. Yes, it is. And for a significant  
2 portion of the rail traffic in North America  
3 that's true.

4 Q. In those circumstances where it is  
5 necessary, is Norfolk Southern then free to refuse  
6 to enter into the interchange agreement that would  
7 be necessary?

8 MR. MOATES: Again, counsel you are  
9 asking him a question of law. You are asking  
10 nuances of the Commerce Act.

11 Joe, if you think you can answer, you  
12 can answer.

13 THE WITNESS: Again, as I said before,  
14 the only thing I can say -- and, again, I am not  
15 familiar with the legal requirement -- is the  
16 interchange exists because of the obligation for  
17 common carriage. I am not aware otherwise absent  
18 that anything that would, you know, require,  
19 legally require that interchange arrangements be  
20 made. That I am aware. I don't know.

21 BY MR. BLITZ:

22 Q. Let me ask this question. Are you

1 agreement.

2 Q. Are you aware of any circumstances --  
3 do you recall any instances in which Norfolk  
4 Southern has refused to enter into any interchange  
5 agreement proposed to it?

6 A. Not that I'm aware of. Again, you are  
7 talking about a vast population of possibilities,  
8 but I am not aware of any.

9 Q. And when such interchange agreements  
10 or, for that matter, trackage rights agreements  
11 are negotiated, is Norfolk Southern always aware  
12 of what volume of hazardous materials such  
13 agreement would enable to be shipped -- would  
14 enable to be transported over Norfolk Southern's  
15 lines?

16 A. You are describing two separate things  
17 here. They are not the same.

18 Q. We will take them one at a time.

19 A. In interchange, again, under common  
20 carrier obligation, we have interchanges. And  
21 though I don't have specifics, we are aware of the  
22 amount of hazardous material traffic that moves

1 aware of any circumstances where Norfolk Southern  
2 has refused to enter into an agreement that would  
3 be necessary, an interchange agreement that would  
4 be necessary for a shipment to reach its intended  
5 destination?

6 A. Not that I am aware of.

7 Q. Are you aware of circumstances where  
8 Norfolk Southern has refused to enter into an  
9 interchange agreement that would be necessary for  
10 a shipment to reach its intended destination  
11 through the most efficient routing available?

12 A. Let me repeat the question. Am I aware  
13 of any instance where Norfolk Southern has refused  
14 to enter into an interchange agreement that would  
15 facilitate the most efficient routing?

16 Q. Right.

17 A. I am hung up on the words "most  
18 efficient routing." It depends on where it is  
19 going. But assuming that where it is going fits  
20 the routing, fits the definition of the term  
21 "efficient routing," I am not aware of Norfolk  
22 Southern refusing to enter into an interchange

1 over these interchanges.

2 Trackage rights agreements are done for  
3 business purposes, where both carriers that are a  
4 party to the traffic rights have specific benefits  
5 they are getting out of the arrangement. And  
6 usually it includes some specificity as to what it  
7 is that will be allowed to be handled under a  
8 trackage rights agreement. And there are all  
9 kinds. There are little ones, you know, to  
10 facilitate some local operation necessity that  
11 needs to be done. There are some large ones in  
12 which a large customer involves two railroads in  
13 which there is trackage rights involved.

14 But they are fundamentally done for  
15 business purposes; and as I said at the very start  
16 of the previous thing, they tend to be voluntary,  
17 specific, mutually agreed to arrangements.

18 Q. Do they always specify maximum volumes  
19 of materials that will move through?

20 A. I don't know. I am just -- just in the  
21 course of my experience they have some  
22 characteristics that are specific, that describe

1 A. Yes.

2 Q. Do you know whether deliberations about  
3 whether Norfolk Southern would consent to "any  
4 proposal to divert large volumes of CSX's  
5 hazardous materials traffic to NSR" began before  
6 that Notice of Objection was served on February  
7 9th?

8 A. I'm not sure. I do not know.

9 Q. Were you involved from the beginning in  
10 those deliberations?

11 A. I don't know the answer to that  
12 question either.

13 Q. Well, as far as you know, had this  
14 issue been discussed before you were first  
15 involved in deliberations about what you say in  
16 paragraph 19?

17 A. I don't know.

18 Q. When did somebody first contact you or  
19 when did somebody at Norfolk Southern first  
20 discuss with you the question of whether NSR would  
21 or "would not consent to any proposal to divert  
22 large volumes of CSX's hazardous materials traffic

1 Q. Looking again at your statement in  
2 paragraph 19, that "NSR would not consent to any  
3 proposal to divert large volumes of CSX's  
4 hazardous materials traffic," is it Norfolk  
5 Southern's position that it won't consent to any  
6 proposal to divert railcars on CSX's lines that  
7 are empty?

8 MR. MOATES: Hazardous materials rail  
9 cars?

10 BY MR. BLITZ:

11 Q. Hazardous materials rail cars that are  
12 empty.

13 A. That's correct. It covers both loaded  
14 and empty rail cars because there still is a risk  
15 that goes along with that.

16 Q. So the reason that you give in here for  
17 this decision applies to empty cars? Is that a  
18 fair interpretation of what --

19 A. It is a fair interpretation. But you  
20 need to understand -- and, again, I have  
21 testified to this earlier -- in the hazardous  
22 materials world an empty car that had hazardous

1 to NSR's lines?"

2 A. I'm not sure, and I do know that a  
3 conversation, a series of conversations were had  
4 with our law department on this question. I just  
5 can't recall exactly when.

6 Q. And you can't recall whether these  
7 conversations started before or after February  
8 9th, 2005?

9 A. I don't know. I don't know.

10 Q. What date was this decision that is  
11 expressed in paragraph 19 of your affidavit that  
12 "NSR would not consent to any proposal to divert  
13 large volumes of CSX's hazardous materials traffic  
14 to NSR's lines," what date was that decision  
15 finalized?

16 A. Was it finalized?

17 Q. Yes.

18 A. I guess on February 15th of 2005.

19 Q. Is it fair to say that it was finalized  
20 in the context of preparing to submit Norfolk  
21 Southern's comments on the STB petition?

22 A. I don't know.

1 materials in it is still considered a hazardous  
2 materials car because there is normally residue or  
3 residual product in the car and it has to be  
4 treated as if it is a hazardous material car.

5 Q. So just to be clear, even if the  
6 diversion of cars onto Norfolk Southern's lines  
7 included only empty cars, that would still be  
8 unacceptable to Norfolk Southern --?

9 A. That's correct.

10 Q. -- under the position you have  
11 described in paragraph 19?

12 A. That's correct.

13 Q. Can you recall any times in which  
14 Norfolk Southern has refused to allow shipments  
15 from CSXT or any other carriers' lines onto its  
16 lines because of its predictions about the effects  
17 on the safety of Norfolk Southern's lines or the  
18 communities on those lines?

19 A. Not that I am aware of.

20 Q. Can you recall any incidents in which  
21 Norfolk Southern has refused to accept shipments  
22 from another carriers' lines onto its lines

**Petition for Reconsideration  
to STB**

**Exhibit 11**

## Senate Homeland Security and Governmental Affairs Committee Holds Hearing on Outlook for Department of Homeland Security

### LIST OF SPEAKERS

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COLLINS:

The committee will come to order.

As I convene the committee's first hearing of the 109th Congress, I want to express my appreciation to the committee's ranking member, Senator Lieberman, who will be here shortly.

I also want to express my appreciation to our other veteran members for their commitment to the committee's work, and for choosing to return during this Congress.

The committee also has four new members -- Senators Warner, Domenici, Chafee and Coburn -- and we look forward to working with them as well.

Along with new members, our committee has a new name: Homeland Security and Governmental Affairs. While the new name will not win praise for its brevity or its style, it does reflect the committee's expanded jurisdiction.

And so it is appropriate that the committee's first meeting of this year is an oversight hearing focusing on the Department of Homeland Security, evaluating the progress made so far and the challenges that remain.

As we prepare for the confirmation hearing of a new DHS secretary, this assessment is especially timely.

The title of our hearing today, "DHS: The Road Ahead," has a deeper meaning than might be immediately apparent. The Homeland Security Act of 2002 established a clear destination for the new department. It was to prevent terrorist attacks within the United States, to reduce our vulnerability to terrorism and to assist in recovery should an attack occur.

The precise route toward that destination, however, remains under construction. We are here to continue building a road that is as efficient, effective and durable as possible.

where your adversary is tenacious and trying to play around the gaps of that, and you do it with on-the-job training by a senior inspector who's also got a very full inbox.

FLYNN:

We really need to look at how we resource the training of these people that we are depending upon to be our front line in this new war on terror.

Next, I would highlight the international dimension.

I've spent quite a bit of time overseas in various places. We don't have a lot of coherence. There's a lot of issues that are aroused by various activities of the government. There's just not enough people in the department to respond to these queries and to be able to handle real policy issues that are arising, nor are the State Department, USTR or others assigning people to the department to do liaison.

And so what we end is (inaudible) crises that end up in the in box and absorb a lot of senior management time to sort out, when they could have been managed in advance without conflict.

The last thing I'll raise is the fuzzy line issue, particularly the Department of Defense, over this issue of homeland defense and homeland security.

The definition, operationally, doesn't work so well. The bad guys aren't going to advertise they're coming from outside the United States to attack the United States. It's likely we'll have an event here, and then we're worried about follow-on attacks.

If we haven't merged more aggressively the homeland security activities and the Department of Defense activities, instead of having DOD essentially operating independently worried about coming from the outside, and DHS working from the inside, I just don't think operationally the threat's going to play out that way. We need an ongoing -- a very hard look at how we make that together.

I know I'm out of time, and with many of these issues we could go on for a long time. I am honored that I have the chance to appear before this first hearing on this important topic, and I look forward to questions.

Thank you, Madam.

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COLLINS:

Thank you.

Dr. Falkenrath?



FALKENRATH:

Madam Chairman and members of the committee, I'm very grateful for the invitation to be here this morning.

I'm particularly honored since this committee has been the cradle of two of the most important pieces of legislation since the end of the Cold War, the homeland security act and then the intelligence act of last year.

I'll be very brief so we have time for questions before you have to go vote.

My direct experience with the management of the department ended in May of last year, when I left the White House, and so my comments -- I'm really most knowledgeable about that period.

But I will say on some of the criticisms about the internal management of the department, that I'm a little surprised by some of them. And I think some perspective is worthwhile here.

This is probably the hardest management task that any Cabinet member has ever been asked to take on. Not only are we in a war, not only are we asking these agencies to do more than they've ever done before, but we are asking them to conduct the largest reorganization in 50 years.

And so, yes, there are some troubles with the management of this organization.

But I will say, as someone who was involved in the initial design of the department, that the performance of the department's leaders have exceeded my expectations.

FALKENRATH:

And I will agree with what Senator Lieberman said in the beginning, that no one thought this was going to be easy at the beginning and we were all right. This is very difficult.

But I think that Secretary Ridge and Secretary Loy have done a very fine job, and I am grateful, Senator Akaka, for your kind words about Secretary Ridge. I think they really deserve more commendation than criticism for what they've done.

There are some difficulties, of course, and another bit of perspective, however, is that - identify one federal department or agency that has not had difficulties. They all do in various ways, and it's sort of inherent in public sector management in one way or another.

And I, frankly, in the studies that have been done and my own experience with the department, am not persuaded that the management of DHS is substantially worse than any other department or agency in the federal government. None of the other departments and agencies, by the way, have to deal with the reorganizational challenge that DHS has had to deal with.

So that was my impression, at least, watching things from the White House.

The department does have a strategic plan. There is a public document that has been released by the secretary that all of you have seen and your staffs have seen.

And there is an internal set of milestones and goals, over 900 milestones and goals, all of which has a timetable and all of which have a presidential appointee associated with every single goal, who meet on a regular basis with the deputy secretary to go over how the department is doing. And these goals were developed in consultation with the Office of Management and Budget and the Homeland Security Council.

And so I think they're a pretty good strategic plan that I've seen.

I'm not going to say that everything is perfect in the department. There are lots of difficulties. But these are extremely difficult choices and challenges that we've asked these appointees to take on, and I think on the whole they've done a pretty fine job.

With respect to Congress, I really think we should commend what the appropriation committees have done. They did the exactly right thing by reorganizing the subcommittees and the appropriations committees.

Those two subcommittees have passed really fine bills on time both years with a minimum of earmarks and really following quite closely the president's request.

The appropriation subcommittees for DHS have become genuine partners in how in the Congress on how the department has to perform, because they know that this is now how it goes.

There's going to be an appropriations bill done every year. It's taken extremely seriously. The department needs to be highly responsive to their requests for information and consultation.

The same cannot be said for the authorizing committees. I'm not going to belabor the point -- Mike made it, the 9/11 Commission made it -- but it's really an unfair circumstance to put the department in on the authorizing side.

The authorizing committee should do what the Appropriations Committee did, in my judgment.

FALKENRATH:

Third point, reorganization: Heritage and CSIS have released a report recommending major internal changes in how DHS is organized.

I think there is nothing sacrosanct about how DHS is organized internally, and there may well be changes that need to occur. But I think this is exactly the wrong time for a statutorily driven internal reorganization of DHS, for four main reasons.

First, we're about to get a new secretary in place. Give him the opportunity to get familiar with his new agency and his job and let him form an opinion. And work with him in terms of what he thinks needs to be done.

Second, I think we need to follow through on the organization that we've established for DHS, not redo it all from start, from the beginning.

Third, reorganization imposes a near-term penalty on performance. We know this very well. We've imposed a lot on various different parts of our government since 9/11. Let's not impose any more, is my judgment.

And fourth, the secretary has certain limited reorganization authorities already, so that he can unilaterally do things that he needs to do, based on the authorities that were conferred in the Homeland Security Act.

If Congress really wants to help him in the near term, what I would recommend you do is increase his unilateral reorganization authority, his ability to manage his department flexibly.

He could use some additional reprogramming authority. He could use a better working capital account. He could use greater flexibility about the names and the number of undersecretaries. And he could use a stronger reorganization authority, Section 872 of the original Homeland Security Act, which we worked on a lot.

Those are things that if conferred on him would help him right now, today, do his job. He does not need another statutorily driven internal reorganization.

Now, I think management of the department is an important issue. And the overseers need to watch it very carefully; the inspector general does, the GAO does. But I don't think it's the most important issue. I don't think it's his highest priority.

I think the highest priority is what he does with his power. The secretary of homeland security is one of the most powerful officers in the entire country, vested with vast regulatory authority and budgetary authority to do things out in the country.

FALKENRATH:

And he's done a lot, I think. I'm not going to give the laundry list of accomplishments.

But there are a few things still that need to be done, which I've reflected on. I wish I had managed to get more of them done when I was in government, but which I think are the highest priorities. I'll just tick them off.

First, credentials and identification standards: This is a glaring gap, a systemic gap in our overall security system. The intel bill has a good provision about federal standards for driver's licenses but doesn't go far enough.

What we need is a national voluntary standard for secure identification that would become mandatory for all federally controlled portals.

These issues I discuss in a little bit greater length in my written statement.

Second, we need to dramatically expand the amount of watch list screening that we do. We have two kinds of watch lists: a name-based watch list, which is lists of names and dates of birth and that sort of thing, and biometric watch lists.

The name-based watch list is now consolidated at the Terrorist Screening Center. So that was a problem pre-9/11, now fixed.

Biometric watch lists are still divided. Eventually, they need to be consolidated.

We spend billions of dollars trying to get terrorist identifying information. We need to use it. We need to use it at every possible opportunity.

And that expansion of screening against watch lists needs to be inside the United States, primarily the secretary of homeland security's job. And I urged you to encourage him to do that and to enable him to do it. Abroad, many officers are involved in this; he needs to assist.

Third, the defining characteristic of the 9/11 attack was that Al Qaida attacked a system in our midst that was inherently dangerous that we had become complacent about, airplanes, and was able to have catastrophic secondary affects on that attack.

We've now taken care of that. Airplanes are no longer in that category.

And fortunately there are a finite number of other such targets that are in that category. One, in my judgment, stands out above the rest as uniquely dangerous and accurately vulnerable, and that's hazardous chemicals, in particular toxic-by-inhalation chemicals: ammonium, methyl bromide, phosgene, chlorine.

These are basically World War I era chemical weapons, which we move through our cities in extraordinarily large quantities and quite low security.

I'm sorry to say, since 9/11 we have essentially done nothing in this area and made no material reduction in the inherent security of our chemical sector. If a terrorist were to attack that sector, there is the potential for casualties on the scale or in excess of 9/11. I hope it doesn't happen, but it's just a fact that this is the case.

This needs to be the next big push in critical infrastructure protection. The executive branch has the authority to regulate this area when it's being transported. It needs no new statutory authority there, just needs executive action.

We do need new statutory authority if we're going to take care of the facilities, because we can't currently regulate the facilities, but we can if it's in transport.

It's my biggest single concern for critical infrastructure protection. It's the one target which I think fits exactly into what Senator Domenici said: priorities. This should be the highest priority. The other ones don't matter nearly as much. This one does.

Fourth, we've made great progress on securing our air transportation system, substantial progress securing our maritime transportation system, very little on ground transportation systems, very little on rails, mass transit systems, trains and trucks.

There is no silver bullet. There is nothing we can do. But we need a coherent program to deal with these vulnerabilities. It will involve some combination of access control, sensors, telematic tracking, geofences.

There's things to be done. We need a push there. DHS needs to lead it.

Finally, terrorism insurance: The Terrorism Insurance Act will expire this year. Primary insurers have dropped terrorism insurance from their general commercial policies. And so now there's basically no buildings in all of America that are insured against terrorism risk.

We should reauthorize the Terrorism Insurance Act and mandate that all general commercial insurance policies include terrorism risk coverage.

FALKENRATH:

Thank you very much for your attention. Happy to take any questions.

COLLINS:

Thank you for your testimony.

**STATEMENT OF  
RICHARD A. FALKENRATH  
VISITING FELLOW  
THE BROOKINGS INSTITUTION  
BEFORE THE  
UNITED STATES SENATE  
COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS**

**January 26, 2005**

**Introduction**

Good morning, Madam Chairman, Senator Lieberman, and Members of the Committee. I am grateful for the opportunity to be here today to provide my views on the present and future challenges facing the Department of Homeland Security (DHS). I would also like to express my gratitude to the Members of the Committee on Homeland Security and Governmental Affairs. You have played a central role in developing two vital pieces of post-9/11 legislation: the Homeland Security Act of 2002 and the Intelligence Reform and Terrorism Prevention Act of 2004. These are historic accomplishments.

**Assessment of DHS Management**

My direct experience with the DHS management extends only to mid-May 2004, when I resigned my position as Deputy Homeland Security Advisor to the President.

Nonetheless, I will offer a few general comments on this subject.

Managing the start-up of the Department of Homeland Security is surely one of greatest managerial challenges any Cabinet officer has ever had to face. The scale and

complexity of the task can hardly be underestimated; the time frame for action was tight and unforgiving; the daily operational and policy demands were relentless; the interagency environment could be treacherous; the external constituencies, perpetually discontented. With circumstances such as these as backdrop, no Cabinet officer will ever succeed at all tasks, all the time. The real question, however, is not whether there are some tasks that a Cabinet officer and his lieutenants have not performed adequately - of course there are and always will be. The real question is whether a Cabinet officer has accomplished the highest priorities objectives assigned to him or her by the President or the Congress. Measured by this yardstick, I believe that the Secretary Ridge and his subordinates have exceeded all reasonable expectations of their performance and are more deserving of commendation than complaint.

Even leaving aside the substantive accomplishments of the Department of Homeland Security during its first two years of existence, the strictly managerial accomplishments of the Department are considerable. On March 1, 2003, 22 agencies transferred to DHS, each with distinct human resource policies and systems; the Department currently utilizes just seven human resource servicing offices. The Department started with 19 financial management service providers; it now utilizes eight. The Department started with seven different payroll providers for the Department; it now has two. The Department started with 27 Consolidated Bank Card Programs; it now has three. These statistics are testament to the real integration that occurred within the Department in its first two years of existence, but they are themselves merely a few items contained within the Department's comprehensive strategic plan - a document that was worked out

in cooperation with the Homeland Security Council and that contains over 900 specific goals and milestones with associated timelines.

I have reviewed the December 2004 report of the DHS Inspector General, "Major Management Challenges Facing the Department of Homeland Security." I do not doubt that some of the specific criticisms levied against the Department are true, but I find the report seriously lacking in that it offers no comprehensive net assessment of the Department's overall managerial performance or its strategic plan. Indeed, the report failed to persuade me that the managerial performance is any way significantly worse than that of any other major federal department or agency - none of whom have had to cope with the unique challenges associated with the largest government reorganization in 50 years.

In my experience, every major federal department and agency has management challenges and deficiencies of one kind or another. The FBI, for example, has had trouble with its computer modernization, laboratory, and fingerprint system accuracy; the FDA has had trouble with its drug approvals; the Air Force has had trouble with certain large aircraft procurements; the national laboratories have had trouble with their security procedures; the Department of Interior has had trouble with the American Indian trust fund; the IRS has had trouble with its computer modernization; NASA has had trouble with its flight safety program; etc. No federal department or agency is immune to management failure. Indeed, I suspect the management record of even the



best managed government agencies is worse than that of mediocre for-profit companies.

The central fact of federal government management today is that the unilateral managerial authority of federal agency heads is a fraction of that enjoyed by their private-sector counterparts. The Department must operate within the confines of its authorizing statutes; spend money only according to the terms of its appropriations bills; hire only those senior officials who have been selected by the President and confirmed by the Senate; and announce new policies and regulations only after they have gone through laborious interagency vetting and clearance. Compared to most other Cabinet offices, the Secretary of Homeland Security has a few additional managerial flexibilities but certainly not enough to make his flexibility comparable to that which is commonplace in the private sector. These considerations should be taken into account before one passes judgment on a government manager's performance.

### **Congressional Oversight of DHS**

I commend the action taken by the House and Senate Appropriations Committees at the beginning of the 108<sup>th</sup> Congress - namely, the creation of a separate Appropriations Subcommittee with sole responsibility for authoring the annual DHS appropriations bills. These two subcommittees performed superbly in their first two years of existence, writing two strong appropriations bills that were delivered to the President's desk on time and with very few "earmarks." These two subcommittees have become genuine

partners in the evolution of the Department of Homeland Security, and the Administration understands the need to be highly responsive to their requests for information and consultation.

The role of the authorizing committees with jurisdiction over some portion of the Department of Homeland Security has been completely different. The 9/11 Commission termed Congressional oversight in this area "dysfunctional," concluding:

Congress needs to establish for the Department of Homeland Security the kind of clear authority and responsibility that exist to enable the Justice Department to deal with crime and the Defense Department to deal with threats to national security. Through not more than one authorizing committee and one appropriating subcommittee in each house, Congress should be able to ask the secretary of homeland security whether he or she has the resources to provide reasonable security against major terrorist acts within the United States and to hold the secretary accountable for the department's performance.

I agree. The demands upon various officers within the Department of Homeland Security to testify before various authorizing committees of both Chambers is incommensurate with the ability of these of any of these committees to pass legislation that will assist the Department fulfill its responsibilities or accomplish its mission. Department of Homeland Security officials face a far greater burden of testifying before Congressional committees than do than their counterparts in other federal departments

and agencies. Members who serve on these overlapping oversight committees should not be surprised if the Department is at times less than fully responsive to their requests for information or consultation.

Many Members of Congress have expressed concern about that internal management of the Department. I believe that the quality of this management will improve if senior Departmental leadership is allowed to spend more time on internal management tasks. Reducing the time-burden of Congressional testimony would be a step in the right direction. An even more important step, however, would be to permit the Department to develop a serious and comprehensive oversight arrangement with a single authorizing committee.

### **Internal DHS Organization**

A number of outside experts have recently begun to circulate proposals for modifying the internal organization of the Department. There is nothing sacrosanct in the Department's present internal structure but I do not believe that a statutorily driven redesign of the Department at this time is either warranted or wise, for four reasons.

- First, the second Secretary of Homeland Security is about to be appointed. He deserves the opportunity to familiarize himself with the Department and its mission, to form his own opinion about what organizational changes beneath him

will improve his ability to fulfill his responsibilities, and to make appropriate recommendations to the President for consideration as legislative proposals.

- Second, the Department of Homeland Security is presently at a stage of organizational development in which it must follow through and complete the original reorganization concept for the Department. It is too early to draw a firm conclusion that this original concept was grossly misguided, and too early to give up on its implementation.
- Third, the Secretary of Homeland Security already has certain limited reorganization authorities. If there is a near-term need to create a new office or appoint a new Assistant Secretary, for instance, the Administration can do so under existing statutes.
- Fourth, if our recent experience with government reorganization has taught us anything, it has taught that reorganization is an immensely distracting endeavor that imposes a significant near-term performance penalty on the entity being reorganized. This penalty is worth incurring only if the long-term benefits of the reorganization are truly compelling. I am not persuaded that this is the case in any reorganization proposals being proposed by outside experts at this time.

One step that Congress could usefully take at this time would be to enhance the Secretary's unilateral reorganization authority in such a way that will allow him to make necessary organizational refinements, once he determines what they are, quickly and efficiently. Specifically, I would recommend that the Congress consider:

- Amending the Department's personnel authorization (Section 103 of the Homeland Security Act) to eliminate the specific titles of the Under Secretaries and instead permit the appointment of up to seven Under Secretaries with titles to be determined by the President, subject to the advice and consent of the Senate.
- Amending the Secretary's reorganization authority (Section 872 of the Homeland Security Act) to permit the abolition of entities, programs, and functions required by the Act, and to make this authority "notwithstanding any other provision of law."
- Directing the Secretary to coalesce the regional boundaries of various units of the Department into a single regional structure, and to streamline the reporting relationship of all Department staff as he sees fit.
- Enlarging dramatically the modest reprogramming authority contained within the Department's 2004 and 2005 appropriations bills.

- Authorizing a flexible, substantial working capital fund more in line with other major Cabinet agencies, such that of the Department of Justice.

I would be pleased to comment on any of the particular proposals for reorganizing the Department being advanced by outside experts later in the hearing.

### **Security Priorities for DHS, 2005-2006**

The efficient management of the Department of Homeland Security is an important objective, but it is not the Department's foremost priority. Looking ahead, the most important challenge for the Department of Homeland Security is to weave ever greater levels of security into the fabric of American society. This is the substance of the Secretary of Homeland Security's job, and is the essence of his political contract with the President, the American people, and their elected representatives. Prior to the creation of the Department of Homeland Security, there was no Cabinet office with this job description. Today there is, and this alone was sufficient reason to establish the Department.

I will not offer a description of the Administration's or the Department's past and on-going accomplishments in the field of homeland security. Instead, I will provide a personal assessment of the highest priority work that remains to be. I will focus on five

areas that fall largely, though not exclusively, within the domain of the Department of Homeland Security.

### 1. Credentials and Identification Standards

The federal government should establish a voluntary national standard for secure identification. This standard should meet the requirement set by the President for federal government identification documents in Homeland Security Presidential Directive 12, namely: "identification that (a) is issued based on sound criteria for verifying an individual employee's identity; (b) is strongly resistant to identity fraud, tampering, counterfeiting, and terrorist exploitation; (c) can be rapidly authenticated electronically; and (d) is issued only by providers whose reliability has been established by an official accreditation process. The Standard will include graduated criteria, from least secure to most secure, to ensure flexibility in selecting the appropriate level of security for each application." After the standard has been promulgated through normal procedures, the provision of identification meeting this standard should be required at all federally controlled portals that are important to security.

This standard should incorporate and supersede all other federal identification programs. Once the standard has been promulgated, the particulars of the identification program will become inconsequential.

It is clear that any decent identification standard will include a strong biometric identifier that associates the person bearing the identification with the person who received it, a

so-called "one-to-one" match. In addition, however, the federal government also has an invaluable counterterrorism opportunity to conduct "one-to-many" screening against a biometric reference database of known and suspected terrorists. Since the only such reference database in existence is fingerprint-based, it is clear an identification standard that incorporates ten fingerprints will yield the best security benefits.

## 2. Expanded Screening against the Alphanumeric and Biometric Terrorist Watchlists

The United States and its allies spend billions of dollars each year, and risk countless lives, to acquire terrorist identifying information. This information is now consolidated into two primary systems: alphanumeric data is maintained in the terrorist identities and screening database managed by the National Counterterrorism Center and the Terrorist Screening Center; while biometric data (fingerprints) is maintained by the FBI's Integrated Automated Fingerprint Identification System. These terrorist reference databases require continual improvement but they are the best of their kind in the world.

The policy of the United States should be to apply this terrorist-identifying information at every available opportunity. Put differently, the United States should develop and deploy name-based and fingerprint-based screening systems that will create opportunities to identify, apprehend or exclude known or suspected terrorists before they carry out their attacks. These systems are already in place at visa-application stations, most points of entry (through the U.S. VISIT system), and in the National Instant Criminal Background Check System, but there are many more public and



private-sector screening opportunities that have not yet been exploited. The Department of Homeland Security should lead the expansion of terrorist screening at home. In addition, the United States should encourage its international partners to deploy compatible screening systems and should promote real-time, cross-border reciprocal querying of terrorist watchlists. The Department of Homeland Security should assist the Department of State in promoting such screening abroad.

### 3. Hazardous Chemical Security and Protection

The essence of Al Qaeda's strategy for causing catastrophic harm to America on September 11 was to strike an inherently dangerous, poorly secured system in our midst. Due to the passage of the Aviation and Transportation Security Act and the work of the Transportation Security Administration, passenger aircraft are no longer poorly secured and hence no longer fall into this target category. It stands to reason that, in the aftermath of September 11, our terrorist enemies are surveying American society to locate other inherently dangerous, poorly secured systems that they could strike with catastrophic secondary effects. Fortunately, the number of such severe vulnerabilities is finite. One, however, stands out as acutely vulnerable and almost uniquely dangerous: toxic-by-inhalation industrial chemicals. These poorly secured chemicals, which in some cases are identical to the chemical weapons used in World War I, are routinely present in vast, multi-ton quantities adjacent to or in the midst of many dense population centers. Toxic-by-inhalation industrial chemicals present a mass-casualty

terrorist potential rivaled only by improvised nuclear devices, certain acts of bioterrorism, and the collapse of large, occupied buildings.

To date, the federal government has made no material reduction in the inherent vulnerability of hazardous chemical targets inside the United States. Doing so should be the highest critical infrastructure protection priority for the Department of Homeland Security in the next two years. The executive branch currently has sufficient regulatory authority to require virtually any security enhancement for chemicals as they are being transported, so executive action is required but new legislation is not. With respect to chemical facilities, the executive branch currently lacks the authority to mandate and enforce security enhancements. The President twice called on the 108<sup>th</sup> Congress to pass such legislation. The 109<sup>th</sup> Congress should heed his call.

#### 4. Ground Transportation System Security

Under the authorities granted by the Aviation and Transportation Security Act and the Maritime Transportation Security Act, and through the work of the Transportation Security Administration and the U.S. Coast Guard, the federal government has made great strides in improving the security of air and sea transportation systems. No real progress, however, has been made in the area of ground transportation security. The operational challenge of securing these ground transportation sectors far exceeds that of securing airports, but the Department of Homeland Security should lead an effort to systematically reduce the vulnerability of U.S. rail, mass-transit, and trucking

transportation systems. There is no "silver bullet" in this domain, but an appropriate security system is certain to include some combination of access control, telematic tracking, geo-fencing, and sensor-based domain awareness. No new statutory authority is required for such an effort given the robust regulatory authorities contained within the Aviation and Transportation Security Act.

#### 5. Terrorism Insurance

Prior to September 11, 2001, most commercial insurance policies covered terrorist losses. This gave private companies as certain market-based incentive to secure their buildings against terrorism, spread the economic risk associated with terrorist across the economy, reduced the federal payout after the attack.

After the catastrophic losses of September 11, 2001, primary insurers began to drop terrorism coverage from their commercial policies. The federal government sought to slow this trend by backstopping the reinsurance industry under the authority granted in the Terrorism Risk Insurance Act of 2002. This act is scheduled to sunset in 2005 and has, in any case, failed to accomplish its most important objective - namely, to promote the sharing of terrorist risk and the implementation of security countermeasures at commercial facilities nationwide.

Congress should reauthorize the Terrorist Risk Insurance Act but should go a step further in order to make the program more valuable from a security point of view.

Congress should mandate that terrorism coverage be included in all commercial insurance policies, and should transfer responsibility for the program from the Department of Treasury to the Department of Homeland Security. Congress should also charge DHS with developing, in cooperation with the insurance industry, standards for private-property protective measures that would lead to premium reductions.

## **Conclusion**

Madam Chairman, I would like to thank you and the Members of your Committee for your continuing service to the country. Thank you again for the opportunity to appear the Committee today. I am happy to answer any questions you may have.

# **Exhibit 25**

**Congress of the United States**  
**Washington, DC 20515**

October 29, 2004

The Honorable Tom Ridge  
Secretary  
U.S. Department of Homeland Security  
Washington, DC 20528

Dear Secretary Ridge:

We are writing to convey our concerns regarding recent information indicating that the Department has abandoned all consideration of requiring CSX to re-route shipments of extremely hazardous materials around Washington, DC as a means of protecting it from a possible terrorist attack. It is also unclear to us whether DHS ever seriously considered re-routing as an option at all. Although CSX has evidently been voluntarily re-routing such shipments since the March 11, 2004 terrorist attacks in Madrid, Spain, the Department's failure to ensure that these voluntary actions are made permanent raises the question whether DHS is doing everything prudently possible to keep residents of the Washington DC area safe.

As you know, enough chlorine to kill or injure 100,000 people in half an hour is often contained in a single rail tanker car going right through crowded urban centers — including Washington DC. An Ohio-based Al Qaeda operative has already been arrested and pled guilty for plotting to collapse a bridge in New York City or derail a train in DC. According to TSA administrator Stone, the Department's rail vulnerability assessment and security plan for DC "will serve as the baseline for shaping national policies in the transport of hazardous materials for other high rail traffic areas"<sup>1</sup>. The outcome of the DC area plan can therefore be expected to have considerable impact nationwide, and our understanding is that DHS next plans to examine rail security in New Jersey and Cleveland.

Recent press reports have indicated that the vulnerability assessment and security plan for the DC rail corridor being conducted by DHS, which was originally expected to be completed by summer 2004, has once again been delayed. These reports, as well as numerous unclassified meetings and telephone conversations conducted by our staff, indicate that while DHS has no plans to require the permanent re-routing of any shipments of extremely hazardous materials around Washington DC, CSX has been voluntarily re-routing such shipments for more than 7 months while continuing to experience growth in its revenues<sup>2</sup>.

In particular, when your staff was questioned on October 14, 2004 regarding its analysis of the economic and other considerations associated with re-routing, they were unable to provide a response and had no idea whether such an analysis had been conducted by anyone at the Department. This left the impression that rather than

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<sup>1</sup> See <http://www.greenpeaceusa.org/pdfs/TSA040604.pdf>

<sup>2</sup> See [http://www.csx.com/share/csx/investor/press\\_release/pressrel3q2004.pdf](http://www.csx.com/share/csx/investor/press_release/pressrel3q2004.pdf)

conducting a true vulnerability assessment that considered all possible security solutions, the Department instead directed the staff to consider all options *except* re-routing as it developed its security plan.

While we support many of the proposed security plan's suggestions, including the use of increased patrols and new technologies to assist in securing the rails, we question whether a terrorist will be deterred by the presence of a camera or a sign warning of police surveillance. It is simply not possible to secure every mile of track around Washington, DC (as well as numerous other cities nationwide) from attack. However, CSX's voluntary decision to re-route around Washington DC does appear to offer a potential solution to remove the most catastrophic consequences from at least one location that is obviously unique in its symbolic value as a possible terrorist target. A rigorous analysis may show that re-routing is not always the complete solution. However, as a result of the Department's failure to perform this analysis, neither Congress nor the Administration will have sufficient information with which to consider its benefits or limitations. Accordingly, we therefore ask for your prompt responses to the following questions:

- 1) Please provide an explanation of why the Department did not consider rerouting as an option as well as the name(s) of all officials involved in making that decision.
- 2) Please make available for questioning, all such officials involved in that decision.
- 3) Please provide copies of all documentation surrounding the DHS decision not to require the re-routing of extremely hazardous materials around Washington DC, including all emails, correspondence, economic analyses performed or received by the Department, reports, presentations, and telephone logs.
- 4) How much will the security plan DHS will soon announce for the Washington DC area cost? Who will assume these costs? What is the target date for announcing this plan?
- 5) DHS will soon conduct vulnerability assessments of the railroads surrounding other cities. Please provide a list of all such cities, along with a timeline for the completion of the assessments. Who is expected to assume the costs of the security plans for these cities?

Thank you for your consideration of this important matter. In light of the upcoming election and inaugural, we ask that you comply with this request as soon as possible. If you have any questions or concerns, please have your staff contact Michal Freedhoff in Rep. Markey's office at 225-2836, John Sopko of the Homeland Security Committee Democratic Staff at 226-2616 or Rosalind Parker in Del. Holmes Norton's office at 225-8050.

Sincerely,

  
Edward J. Markey

  
Jim Turner

  
Eleanor Holmes Norton

## **Exhibit 26**



150 of 639 DOCUMENTS

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The Atlanta Journal-Constitution

January 28, 2005 Friday Home Edition

SECTION: News; Pg. 6A

LENGTH: 466 words

HEADLINE: Ex-Bush officials cite toxic threat;  
GOP blocked safeguards, book says

BYLINE: JULIA MALONE

SOURCE: Cox Washington Bureau

BODY:

Washington --- Former Bush Cabinet member Christie Todd Whitman charges in a new book that Republican lawmakers and industry allies blocked her efforts to safeguard plants that produce highly toxic substances.

Whitman, who served as administrator of the Environmental Protection Agency, says that 15,000 facilities that store poisonous industrial chemicals nationwide are potential targets for terrorism.

In her book, "It's My Party Too," Whitman writes that the White House homeland security strategy, drafted in response to the Sept. 11, 2001, terrorist attacks, called for the EPA to take the lead in protecting chemical facilities. But she says that "strong congressional opposition" stopped the effort in its tracks.

Whitman's assessment was made public amid growing concern about failure to safeguard the nation's huge supplies of toxic chemicals.

Richard Falkenrath, former deputy homeland security adviser to President Bush, told a Senate hearing Tuesday that the failure to regulate chemicals was his "major disappointment" in the domestic response to the terrorist threat. Industrial chemicals "move through our cities in extraordinarily large quantities and quite low security," Falkenrath testified. "It's fair to say that since 9/11, we've essentially done nothing in this area."

The federal Centers for Disease Control and Prevention warned Thursday of the dangers of the 800,000 shipments of hazardous substances sent daily throughout the United States by truck, train, airplane, boat and pipeline.

Falkenrath told the Senate Homeland Security and Government Affairs Committee that Congress should pass legislation to regulate chemical plants. But he said the federal government already has the authority to impose transportation rules, such as requiring sturdier containers, smaller loads and more screening for drivers.

Asked later why the Bush administration had not enacted such rules, Falkenrath said: "It's just bureaucracy. I tried and failed. It's just one of these things that should have gotten done."

Homeland Security Secretary Tom Ridge, who is stepping down from his post this week, also urged action in the chemical area. In an interview this week with National Public Radio, Ridge said that the "next significant effort that we need to undertake in the country" is to protect chemical facilities, telecommunications facilities and transportation systems other than aviation.

The American Chemistry Council has vigorously opposed proposals to give the EPA authority over plant security.

"We do not believe that EPA is the right agency with the right expertise," said council spokeswoman Kate McGloin. But she said the group now favors federal legislation, so long as the security oversight is given to the Department of Homeland Security.

**GRAPHIC:** Photo: Christie Todd Whitman, former EPA director, writes that congressional opposition thwarted efforts to improve chemical plant security. / SUSAN WALSH / Associated Press

**LOAD-DATE:** January 28, 2005

# **Exhibit 27**

washingtonpost.com

## Infighting Cited at Homeland Security

Squabbles Blamed for Reducing Effectiveness

By John Mintz

Washington Post Staff Writer

Wednesday, February 2, 2005; Page A01

As its leadership changes for the first time, the Department of Homeland Security remains hampered by personality conflicts, bureaucratic bottlenecks and an atmosphere of demoralization, undermining its ability to protect the nation against terrorist attack, according to current and former administration officials and independent experts.

Although the 22-month-old department has vast powers over the lives of travelers, immigrants and citizens, it remains a second-tier agency in the clout it commands within President Bush's Cabinet, the officials said. Pockets of dysfunction are scattered throughout the 180,000-employee agency, they said.

There is wide consensus that the agency has made important strides in a number of areas, including establishing high-speed communications links with state and local authorities, researching sensors to detect explosives and biopathogens, and addressing vulnerabilities in the nation's aviation system. Its weaknesses, including scant progress in protecting thousands of U.S. chemical plants, rail yards and other elements of the nation's critical infrastructure, have received considerable public attention as well.

Less well known is the role that turf battles, personal animosities and bureaucratic hesitancy have played in limiting the headway made by the infant department, an amalgam of 22 federal agencies that Congress merged after the Sept. 11, 2001, attacks, officials said.

- The department made little progress protecting infrastructure because officials spent much of their time on detailed strategic plans for that task and believed they were technically prohibited by law from spending money on most such efforts. Others in government disagreed, and DHS officials did not reword the technical legal language until recent months.
- Two arms of the department gridlocked over efforts to secure hazardous chemicals on trains -- one of Congress's most feared terrorist-attack scenarios.
- Lengthy delays in deciding which agency would take the lead in tracking people and cargo at U.S. ports of entry resulted from similar disputes. Efforts to develop tamper-proof shipping containers were among the initiatives stalled.
- The department's investigative arm, Immigration and Customs Enforcement (ICE), has operated under severe financial crisis for more than a year -- to the point that use of agency

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vehicles and photocopying were at times banned. The problem stems from funding disputes with other DHS agencies.

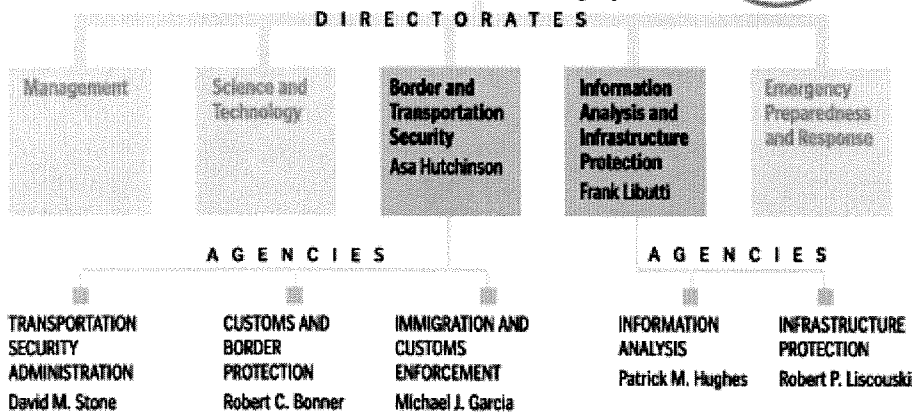
Richard A. Falkenrath, who until last May was Bush's deputy homeland security adviser, said many officials at the department were so inexperienced in grasping the levers of power in Washington, and so bashful about trying, that they failed to make progress on some fronts.

"The department has accomplished a great deal in immensely difficult circumstances, but it could have accomplished even more if it had had more aggressive and experienced staff," said Falkenrath, now a fellow at the Brookings Institution. "It would have done better if it had been less timid, less insular and less worried about facing down internal and external opposition."

Two Homeland Security directorates have come under fire for management problems, including turf battles, personal animosities and bureaucratic hesitancy.

**SECRETARY**  
Michael Chertoff,  
nominee

Names are of  
directorate or  
agency chiefs.



"This department is immensely powerful in society, given its central role in foreign trade, immigration and transportation," he added. "But it is far less powerful in interagency meetings and the White House situation room."

Michael Chertoff, a federal appeals court judge who is Bush's nominee to succeed the department's first secretary, Tom Ridge, begins confirmation hearings today. He has been described as a no-nonsense administrator who would not hesitate to intercede in turf wars or get tough with recalcitrant bureaucrats.

### Growing Pains

Homeland Security leaders accept many of the criticisms of the department's performance by government officials and experts but reject others as unfair. "Nobody fully understands the complexity of our task: to build a department out of 22 agencies, operate it, reorganize it, and design and build networks and systems that will defend the nation in perpetuity," said Ridge, who stepped down yesterday. Ridge is widely credited with managing the first phase of the most complicated government reorganization since the 1940s. But the former Pennsylvania governor also is noted for having a politician's desire to please all comers, which resulted in some policy quandaries remaining unaddressed for long periods, officials and experts said.

Top DHS officials point out that much of their time has been spent crafting eight huge internal initiatives. Finished in some cases only in recent weeks, they map out the department's new information technology, payroll, personnel, procurement and other systems.

Among other time-consuming initiatives were laying out new doctrines for counterterrorism preparedness that assigned the responsibilities of many agencies before and after an attack. Almost all this work, which involved tedious vetting by dozens of agencies, is now complete, but it was invisible to the public and will yield results only in the future, officials said.

"These are a family of plans coming into play that's received virtually no publicity," said retired Coast Guard Adm. James M. Loy, deputy secretary of homeland security, who is widely described as the department's strongest manager. "When he comes, we want to say, 'Judge Chertoff, here is the strategic plan.' "

All the while, Homeland Security has had to contend with the daily demands of searching air travelers, patrolling harbors, protecting the president, distributing threat warnings to state and local agencies, and many other duties.

But several current and former officials said the department remains underfinanced and understaffed and suffers from weak leadership.

"DHS is still a compilation of 22 agencies that aren't integrated into a cohesive whole," said its recently departed inspector general, Clark Kent Ervin, who released many critical reports and was not reappointed after a falling-out with Ridge. Asked for examples of ineffectiveness, he replied: "I don't know where to start. . . . I've never seen anything like it."

Ervin cited a report from his office last month that DHS immigration inspectors had continued to let dozens of people using stolen foreign passports enter the United States -- even after other governments had notified the agency of the passport numbers. Using stolen passports is a well-known tactic of al Qaeda operatives.

Even when immigration officials realized someone had entered the United States on a stolen passport, they did not routinely notify sister agencies that track illegal immigrants, the report said.

When officials made missteps such as this, Ridge rarely intervened, Ervin said. "Tom Ridge is a prince of a man, but he's not a tough guy," he said.

"Nobody's kicking anybody to do things" at Homeland Security, said Seth Stodder, former policy and planning director at the department's Customs and Border Protection agency. "There's a reluctance to make decisions that will be unpopular with the loser, so things just drift."

Stodder and other government officials said the department's main problem is that, under pressure from the White House to keep staffing lean, it lacks a policy staff to study its largest strategic challenges. The Pentagon, by contrast, has 2,000 people doing that, he said.

"It's very thinly staffed at the top of DHS, and there's no policy vision . . . thinking through the main threats," Stodder said. In the absence of such strategic thinking, he added, "DHS practices management by inbox, getting distracted by daily emergencies" such as a

congressman's complaint about a late-arriving passport.

Acknowledging that the lack of a policy staff was a mistake, DHS officials say one will be launched within days.

### **Infrastructure Protection**

One of the department's biggest failings is its performance securing the U.S. infrastructure, some members of Congress and administration officials said. Fifteen people declined requests to apply for the undersecretary job supervising this area, and the person who took it, retired Marine Lt. Gen. Frank Libutti, was not confirmed until 2003.

Libutti was unfamiliar with Washington's ways, as was his subordinate who directly oversaw infrastructure, former Coca-Cola Co. executive Robert P. Liscouski. Both became distracted by small bureaucratic obstacles they could have surmounted, other officials said.

Members of Congress and others in the administration have expressed frustration at what they say are lengthy delays in producing a list of vulnerable infrastructure sites. Officials involved in infrastructure protection said some of the delays were caused by Liscouski, who, they said, at times failed to coordinate with others working on the matter. He has had several bitter arguments with members of Congress and their staffs, they said.

Finally, the infrastructure division was at times distracted by arguments between camps of officials pressing the competing agendas of firms or other agencies offering plans to secure plants and landmarks, officials said.

Liscouski denied that any such disputes distracted his office, and he denied failing to meet with colleagues. He said he met continually with them and had "an open-door policy." He disputed suggestions that his office dragged its feet in securing or preparing lists of infrastructure sites.

"We worked with a sense of urgency, and we made significant progress," he said. "But this work had never been done before, and it was hard."

Liscouski said that until the past few months, technical language in DHS budgets barred his office from spending money on chemical plants and other sites. Department officials said that within days they will announce distribution of \$92 million, the first large expenditures for these purposes. The money will be given to states by a separate DHS bureaucracy.

The infrastructure office also has been hobbled by turf fights. Another DHS agency -- the Transportation Security Agency (TSA), with 45,000 airport screeners -- said that a sentence in a budget law established it as overseer of security on trains, including ones moving dangerous chemicals. Hassles between TSA and infrastructure officials slowed progress, including efforts to secure chemicals that travel on tracks near the U.S. Capitol, for a year, officials said.

"I'm sorry to say, since 9/11 we have essentially done nothing" to secure chemical plants and trains carrying chemicals, Falkenrath told Congress last week. "This [issue] stands out as an enormous vulnerability we had the authority to address."

The TSA's claims that it supervises all transportation security also led to fights with DHS agencies that handle immigration and customs. The struggles delayed progress for a year on



developing anti-tampering technology for shipping containers and deciding which databases to use to track foreigners and cargo entering the country, officials said.

The fighting amounted to "a civil war within the U.S. government," one former official said.

Eventually Ridge decided that the TSA should not lead the way on these issues. But an authoritative study released in December by the Center for Strategic and International Studies and the Heritage Foundation concluded that the TSA's actions led to years-long "policy impasses." It said the DHS section that oversees the agencies involved, and which refereed the struggles -- Border and Transportation Security -- was "not particularly effective" in straightening it out.

Several officials described the undersecretary for Border and Transportation Security, former representative Asa Hutchinson (R-Ark.), as a consensus-builder who had difficulty demanding an end to the turf fights. Especially troublesome was a personality conflict between the affable Hutchinson and one of his subordinates, Robert C. Bonner, the aggressive head of Customs and Border Protection, whose airport and seaport inspectors investigate people and cargo.

"There were knock-down, drag-out meetings every day" between leaders in some parts of the department, said Loy, who added that "management styles can pour gasoline" on such arguments. But he said the fights are now resolved.

Asked about conflicts with Bonner, Hutchinson said: "I'd be enormously disappointed if I didn't have agency leaders who leaned forward and fought for their agencies." But, he added, "people who work under me know I make decisions."

Through a spokesman, Bonner declined to comment.

Loy, who once ran the TSA and will step down March 1, said the Homeland Security Department is fated to be criticized for its public failures, such as creating long lines at airports, and rarely praised for its success protecting the country.

"Most of the publicity is bad, but that's the nature of our work," he said. "We operate in a fishbowl."

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**Petition for Reconsideration  
to STB**

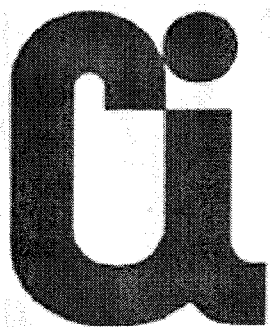
**Exhibit 10**

# **ESTIMATING THE AREA AFFECTED BY A CHLORINE RELEASE**

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**Edition 3**

**April 1998**



**THE CHLORINE INSTITUTE, INC.**



**PAMPHLET 74**

#### 4.4.4 90-Ton Rail Tank Car

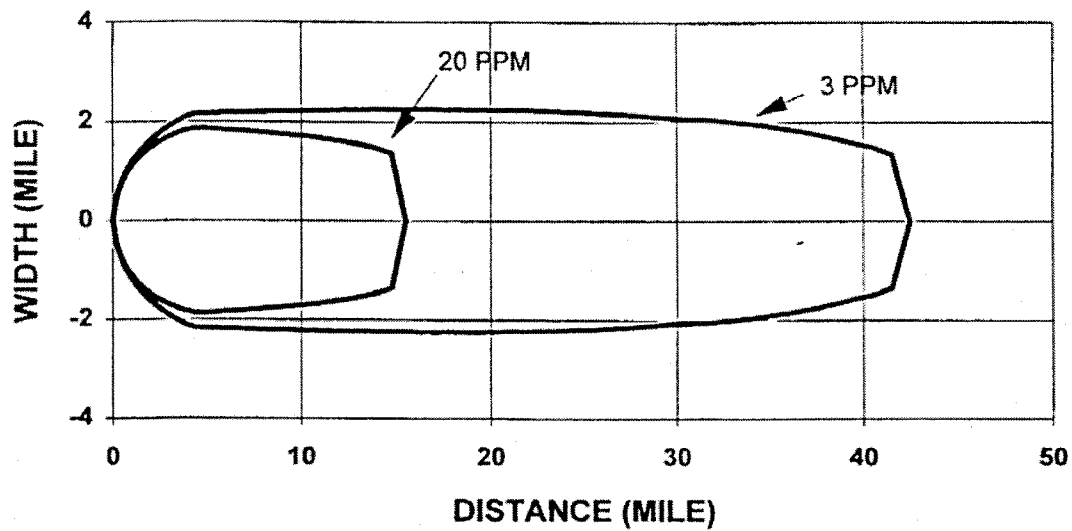
- total mass release = 180,000 pounds
- 10 minute release
- 300 pounds/second steady rate release
- release occurs on concrete surface

Maximum downwind distance to 3ppm = 41.5 miles

Maximum crosswind distance to 3ppm = 2.3 miles

Maximum downwind distance to 20ppm = 14.8 miles

Maximum crosswind distance to 20ppm = 1.9 miles



Note: The scales on the X and Y axes are different.

#### 4.4.2 1-Ton Container

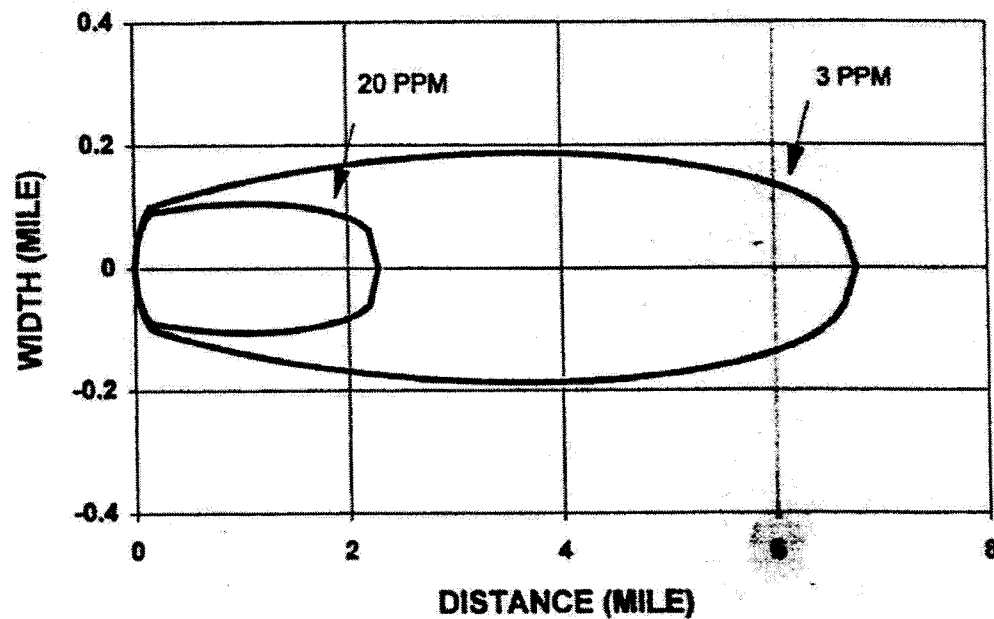
- total mass release = 2,000 pounds
- 10 minute release
- 3.33 pounds/second steady rate release
- release occurs on concrete surface

Maximum downwind distance to 3ppm = 6.7 miles

Maximum crosswind distance to 3ppm = 0.2 miles

Maximum downwind distance to 20ppm = 2.2 miles

Maximum crosswind distance to 20ppm = 0.1 miles



Note: The Scales on the X and Y axes are different.

## **Exhibit 8**

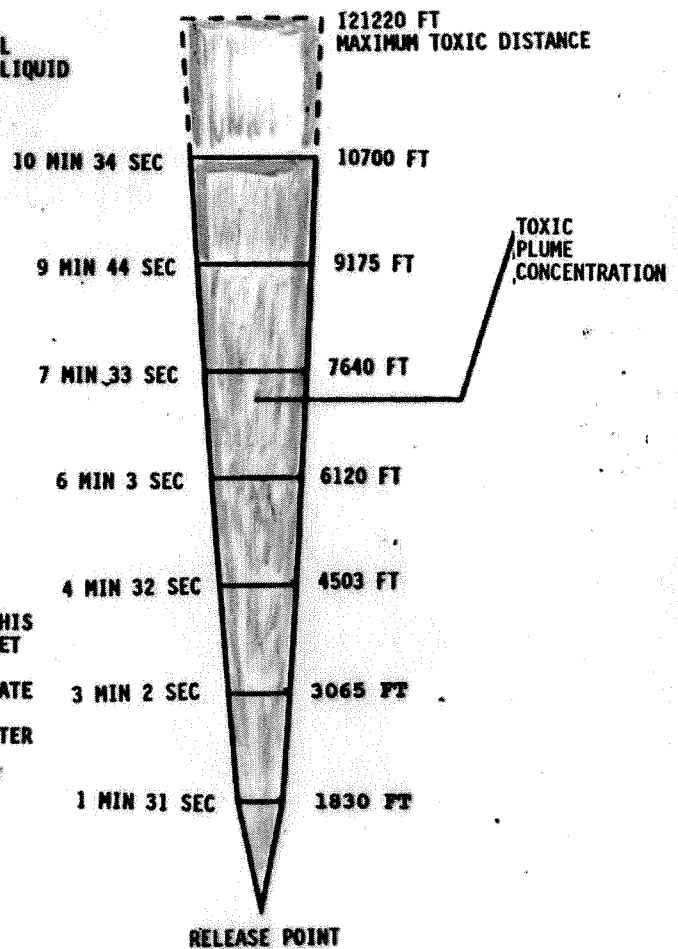
# AIR DISPERSION RELEASE MODEL

Source: U.S. Coast Guard Hazards Assessment Computer System(HACS)

THE ACCIDENT WHICH IS MODELED HERE: A TYPICAL CHLORINE RAIL TANK CAR, PUNCTURE ACCIDENT THAT RESULTS IN RAPID LOSS OF LIQUID CHLORINE.

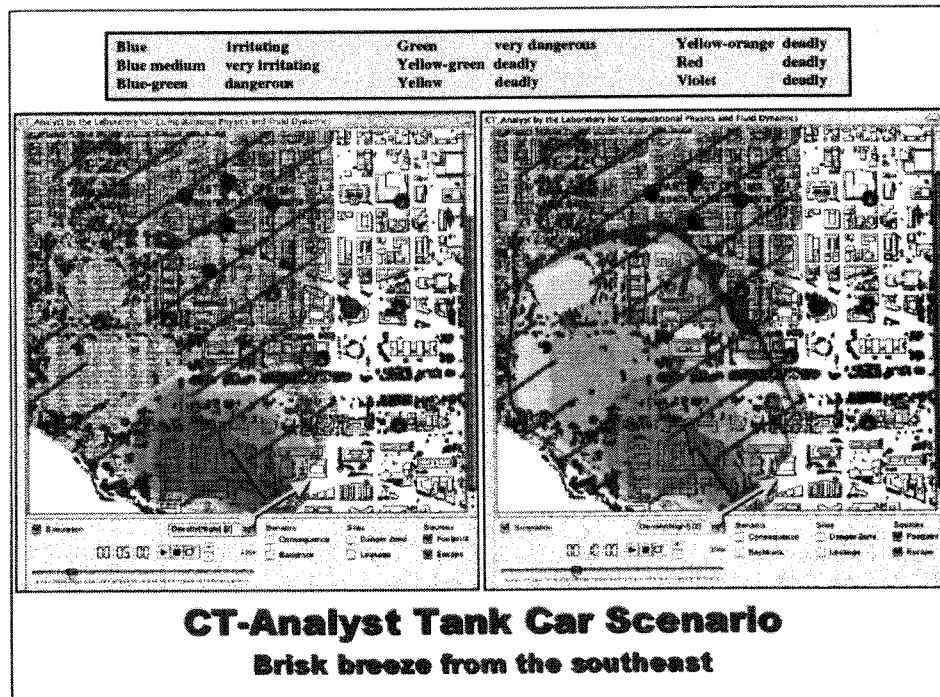
CHEMICAL: CHLORINE  
LOWER EXPLOSIVE LIMIT: NONE  
AMOUNT: 17,100 GALLONS  
PUNCTURE DIAMETER: 12 INCHES  
AIR TEMPERATURE: 36 DEGREES F  
WIND SPEED: 11.5 MPH  
ATMOSPHERIC CONDITION: STABLE  
TOXIC LEVEL : 100 PARTS PER MILLION  
MAXIMUM TOXIC DISTANCE: 22.96 MILE

THIS "PLUME MAP" DISPERSION MODEL WAS DESIGNED BY THE U.S. NATIONAL TRANSPORTATION SAFETY BOARD TO BE USED AS A TRANSPARENCY OVERLAY OVER A STANDARD 7.5-MINUTE COMMUNITY TOPOGRAPHIC (QUADRANT) MAP FROM THE U.S. GEOLOGICAL SURVEY. THIS PLUME MAP PAGE CAN BE XEROXED DIRECTLY ONTO A TRANSPARENCY SHEET IN A STANDARD COPY MACHINE. THE QUADRANT MAPS COST ONLY \$2.50 EACH. TO SEE WHICH MAPS YOU NEED, GET YOUR FREE STATE MAP BOOKLET (E.G., OHIO "INDEX TO TOPOGRAPHIC MAP COVERAGE") FROM NEAREST USGS OFFICE OR FROM: USGS, BOX 25386, FEDERAL CENTER BLDG. 41, DENVER COLORADO 80225. THEN LOCATE THE EXACT 7.5 MINUTE QUADRANGLE MAP(S) YOU NEED AND ORDER FROM SAME USGS SOURCE. A VERY USEFUL TEACHING DEVICE: NOTE THAT A CHLORINE GAS CLOUD CAN GO DOWNWIND AT 100 PARTS PER MILLION TOXIC LEVEL 2 MILES IN 10.5 MINUTES AND EVENTUALLY AS FAR AS 22.96 MILES.



## **Exhibit 9**

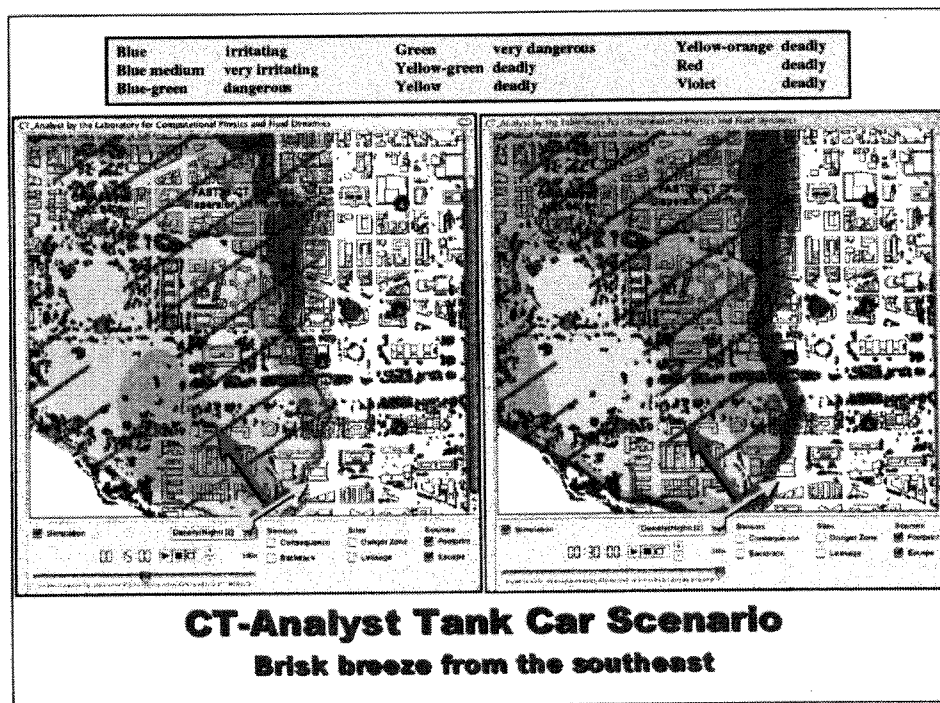




These two figures show the advancing plume at five minutes (left) and ten minutes (right) after the release occurred. Three adjacent blue stars are used to mark the extended region over which this release has occurred from a moving railroad tank car. The yellow arrow indicates the direction of motion along the track and the pink arrow is the prevailing wind direction in each figure. The brisk breeze here is a worst case because slower winds allow much easier evacuation from the affected area and much faster winds dissipate the cloud so quickly that fewer people at any one spot receive critical dosages.

Almost everywhere in the plume (colored region) there is a high probability that the contamination will be lethal after five minutes has elapsed and almost all of the plume is still lethal at ten minutes. At ten minutes the lethal plume area is spreading at about its maximum rate. If 100,000 people receive critical (lethal) doses in the absence of any defensive action, they are crossing this critical dose threshold at the rate of a hundred people per second. Thus there is an enormous benefit to immediate warning delay and speedy defensive response.

Based on a number of other simulations not shown here and a consistent analytic theory, a warning issued within 3 minutes is possible with an automated sensor network and near complete situation assessment and response should be possible within five minutes. Though many procedural and communication problems remain to be solved, these times should be adopted as goals because so many lives will depend on making these response times as short as possible. Between five minutes and the current goal of issuing a warning in 15 minutes, 60,000 people or more could be critically dosed.



These two figures show the advancing plume in the previous scenario at 15 minutes (left) and 30 minutes (right) after the release has occurred. By 30 minutes the plume has spread laterally about as much as it will but it is still quite toxic and still expanding downwind off the edge of the nomograph. At 30 minutes the plume extends three to four miles downwind, is about 1.5 miles wide at its widest, and is still dangerously toxic as indicated by the large yellow-green region above right. If people are standing or sitting as much as 15 feet apart in all directions at an event on the Mall, there would be well over 100,000 people per square mile. Furthermore, the contaminant plume in this scenario will be dangerous over several square miles. Therefore, in the absence of an early warning and concerted action (rapid evacuation away from the centerline of the plume) over 100,000 people could be seriously harmed or even killed in the first half an hour.

Although this is a dire scenario, the people several miles downwind from the source, in this example a couple miles off the upper left corner of the figures, have plenty of time to walk out of the way of the plume given a warning in five minutes or less. They would have to walk only about 3/4 of a mile at worst to get completely out of the plume and would have 20 to 25 minutes to do this. Walking is recommended in urban areas since the roadways should be kept open for emergency traffic and will gridlock instantly if everyone tries to leave in their cars at the same time.

## **Exhibit 10**

# **PLANNING SCENARIOS**

## ***Executive Summaries***

Created for Use in National, Federal, State,  
and Local Homeland Security Preparedness Activities

**The Homeland Security Council**

David Howe, Senior Director for Response and Planning

**July 2004**

## Scenario 8: Chemical Attack – Chlorine Tank Explosion

### *Executive Summary*

<b>Casualties</b>	17,500 fatalities; 10,000 severe injuries; 100,000 hospitalizations
<b>Infrastructure Damage</b>	In immediate explosions areas, and metal corrosion in areas of heavy exposure
<b>Evacuations/Displaced Persons</b>	Up to 70,000 (self evacuate)
<b>Contamination</b>	Primarily at explosion site, and if waterways are impacted
<b>Economic Impact</b>	Millions of dollars
<b>Potential for Multiple Events</b>	Yes
<b>Recovery Timeline</b>	Weeks

### **Scenario Overview:**

#### *General Description –*

Chlorine gas is poisonous and can be pressurized and cooled to change it into a liquid form so that it can be shipped and stored. When released, it quickly turns into a gas and stays close to the ground and spreads rapidly. Chlorine gas is yellow-green in color and although not flammable alone, it can react explosively or form explosive compounds with other chemicals such as turpentine or ammonia.

In this scenario, the Universal Adversary (UA) infiltrates an industrial facility and stores a large quantity of chlorine gas (liquefied under pressure). Using a low-order explosive, UA ruptures a storage tank man-way, releasing a large quantity of chlorine gas downwind of the site. Secondary devices are set to impact first responders.

#### *Timeline/Event Dynamics –*

Total time to plan and prepare for the attack would be on the order of 2 years, including reconnaissance and weapons training, and accumulation of weapons. The actual infiltration, explosive charges setting, and ex-filtration would take less than 20 minutes. Except in very cold conditions, the release would be complete in less than an hour. The plume would travel downwind and be dispersed below the detection level in 6 hours. In order for the UA to succeed in this attack, certain meteorological conditions – wind speed, temperature, humidity, and precipitation – must be met.

***Secondary Hazards/Events –***

Authorities will shelter-in-place a significant area downwind of the site. Numerous injuries will result from population panic once downwind casualties begin to occur, and as many as 10% of the people will self-evacuate. Additional injuries are likely, due to motor vehicle accidents in the surrounding roadways. The rule of thumb is one fatality per 10,000 evacuated. Any local waterways or wetlands will absorb the chlorine gas, creating hydrochloric acid and lowering the acidity (potential of hydrogen, or pH) of the water.

**Key Implications:**

Assuming a high-density area, as many as 700,000 people may be in the actual downwind area, which could extend as far as 25 miles. Of these, 5% (35,000) will receive potentially lethal exposures, and half of these will die before or during treatment. An additional 15% will require hospitalization, and the remainder will be treated and released at the scene by Emergency Medical Service (EMS) personnel. However, approximately 450,000 “worried well” will seek treatment at local medical facilities.

The storage tank will be lost, along with some sensitive control systems damaged by the freezing liquefied gas. The secondary devices will cause damage to other plant facilities and equipment in a 20-meter radius of the blasts as well. There will be hundreds, if not thousands, of auto accidents during the evacuation. In areas of heavy chlorine exposure, there will also be heavy corrosion of metal objects.

The plant will be temporarily closed due to bomb damage. Overwhelming demand will disrupt communications (landline telephone and cellular) in the local area. Significant disruptions in health care occur due to the overwhelming demand of the injured and the “worried well.”

Decontamination, destruction, disposal, and replacement of major portions of the plant could cost millions. The local economy will be impacted by a loss of jobs at the facility if it is unable to reopen. An overall national economic downturn is possible in the wake of the attack due to a loss of consumer confidence.

Most of the injured will recover in 7 to 14 days, except for those with severe lung damage. These individuals will require long-term monitoring and treatment.

## **Exhibit 11**

**Petition for Reconsideration  
to STB**

**Exhibit 11**



Testimony of Benjamin A. Gitterman, MD

Co- Director, Mid-Atlantic Center for Children's Health  
and the Environment

Associate Professor of Pediatrics and Public Health  
Children's National Medical Center and  
George Washington University  
Washington D.C.

presented to

Council of the District of Columbia  
Committee on Public Works and the Environment

January 23, 2004

Benjamin A. Gitterman, MD  
Children's National Medical Center  
111 Michigan Avenue NW  
Washington DC 20010  
Tel - 202-884-3948

Thank you for the opportunity to speak with the Committee on Public Works and the Environment this afternoon, and thank you for taking your time in order to hold this hearing today. The potential health related dangers regarding the issue being discussed today cannot be overstated – this danger is not theoretical, it is very real. By addressing this issue at this hearing, I can only hope that, collectively, the best of judgement will prevail in taking all measures to ensure the safety of our citizens.

First and foremost, I am a proud resident of Washington DC since 1995. I am equally proud to have spent most of my professional time working directly regarding the health care of both individual and populations of children. Wearing my hat as a general academic pediatrician, I have personally provided primary care for families of children and I have supervised the care of many more. In my other role, as an expert in Pediatric Environmental Health, I have been actively involved in the process of education of health care professionals, and the general population regarding issues of environment toxicant risks and exposures for children. Above all, I have been taught by the best, and have always been advised to share only information in this regard which based on scientific fact, not just hearsay. On one hand, I have been a member of the National Committee on Pediatric Environmental Health of the American Academy of Pediatrics and on the other, I am a member of the Environmental Health Committee of the Scientific Advisory Board of the US EPA (Environmental Protection Agency) although I do not specifically represent either of those two organizations today.

In preparing these brief remarks, I have no doubt that you will have heard testimony which outlines the issues of the vulnerability of the citizens of the District of Columbia as relates to transportation routes and issues of terrorism. You are likely to have heard historical information, regarding chemical warfare and poison gas casualties, and regarding unintentional accidents releasing poison gas release. I will not, in the interest of time, reinvolve either the tragedies or the potential for tragedy from the perspective of logistical issues.

I prefer to speak as a health care professional, and speak briefly about the meaning of such potential exposures medically.

Chlorine gas release is, to paraphrase a popular book and film title, a clear and present danger, to the health of individuals. Acute, or short-term exposure to high levels of chlorine in humans results in chest pain, vomiting, toxic pneumonitis (toxic lung inflammation), pulmonary edema (water or swelling on the lungs) and death. It is very simple and straightforward. There is need for fancy graphs, tables or numbers. Even low level exposure is a potential irritant to the respiratory tract and the eyes. It (and ammonia) is probably the most dangerous toxin by inhalation that is "routinely" available.

Exposure to a leak or immediate release from a 90-ton rail car, can easily and quickly (within a few minutes) be fatal. The US EPA Office of Air Quality Planning and Standards has ranked chlorine to be a "high concern" pollutant based on its severe and acute toxicity.

The Occupational Safety and Health Safety Administration permissible exposure limit is only 3 mg/m<sup>3</sup>. This is a minimal exposure, which would be highly surpassed instantaneously in the event of uncontrolled accidental gas exposure. The rapidity of the exposure would be enormous, at any time of day or night and at any season of the year. The urban population density, both residential and working, of Washington D.C. (and any city of comparable size) makes the potential immediate risk of such an exposure overwhelming. Children, seniors and adults with even mild underlying chronic respiratory diseases (asthma, emphysema, etc) are at even greater risk.

Protocols for actual treatment of individuals are poorly developed. To put it directly, there are no "antidotes". Medical care in these cases is purely supportive; helping the patient get through the exposure episode and also treat any additional short or longer-term complications. Because of the severity of the respiratory disease related effects, that support is largely technologically driven; it relies on the availability of machines, not just the availability of medication. The need for such technology support could become overwhelming, almost immediately.

Since the September 11, 2003 tragedy, our city and its facilities, both public and private, have done an admirable job of emergency readiness preparation. This is particularly true regarding our hospitals and emergency medical centers. The cooperation and collaborations, both intra- and inter-institution, have brought us to the highest level of preparation we have probably ever enjoyed, and we strive to improve that still. Yet even the most well planned system would still be overwhelmed by an incident such as a chlorine filled rail car tank.

Truly effective health care, to be effective, must be preventive, not reactive. A toxic gas release of any magnitude will, to be blunt, kill people immediately, before all of our emergency readiness can be of any use.

I am constantly amazed and disturbed as a physician, by the frequency that, as individuals and as a society, we miss easy opportunities to act preventively in our day to day lives. Instead, we put huge sums of money and resources into health care to treat people after they fall ill. The same applies here. The health risks are not imaginary, they are frighteningly real. Acts of terrorism, as well as unexpected accidents regarding rail cars have, regrettably, been proven to be real. Prevention, as you may have heard today, is easy. Please don't pass up this opportunity to prevent unnecessary tragedy.

Thank you for your kind attention to my remarks and to this important matter. I can be reached at 202-884-3948.

## **Exhibit 12**



## Metropolitan Washington Public Health Association

P.O. Box 4843, Cleveland Park Station, Washington, D.C. 20008

January 22, 2004

DC Councilmember's Kathleen Patterson, David Catania and Carol Schwartz  
John Wilson Building  
1350 Pennsylvania Avenue NW  
Washington, DC 20004

Dear Council members:

We are writing to support Council Bill 15-525, "The Terrorism Prevention and Safety in Hazardous Materials Transportation Act of 2003", and with the passage of this Bill to urge prompt local action to remedy an ongoing huge gap in homeland security in the District. In a time of heightened terrorism risk, District citizens are put at unnecessary risk from the chemical transportation industry that continues to transport hazardous materials within the District city limits. Furthermore, regulatory officials are determined not to challenge this "business as usual" dangerous practice. We as public health professionals in this community support the provisions in Council Bill 15-525 to protect the public and prevent efforts to route extremely dangerous cargoes of hazardous materials through well-populated and high-risk target areas of the city. In so doing, there will be dramatic reductions in risk both from accidental as well as terrorism-related releases of these hazardous materials.

Although many residents observe that railroads and trucks continue to bring extremely hazardous materials such as chlorine through the District that is a highly visible and vulnerable target city for terrorists, they remain ignorant of the potential catastrophic consequences of an event where such materials may be released in the city. Federal and District responsible officials have not effectively educated the city residents who are at-risk regarding such scenarios of the consequences, nor have they mandated sensible re-routing of even the most dangerous cargoes to avoid providing high profile attractive targets for terrorists.

As we understand it, your bill would ban the shipment of the most dangerous cargoes, currently passing within four blocks of the Capitol. Modeled closely on the longstanding New York City Fire Code Chapter 40, upheld in 1982 in federal court, the bill would re-route only the most hazardous shipments - a subset of those designated by the federal Department of Transportation - to alternative rail and highway routes which could take the most dangerous cargoes through non-target communities on routes 50 miles west of the District. This seems to us to be a rational follow up consistent with the District's earlier action to convert the Blue Plains sewage plant from chlorine gas to bleach, thus eliminating the terrorist threat at that facility.

We applaud you for introducing this Bill and for addressing directly new threats to public safety with a strong prevention approach. We hope you will continue to support the candid assessment of the District's vulnerabilities in our public health infrastructure and in emergency preparedness, now even more necessary in times of terrorism concern, and insist on remedies for the most important identified gaps.

Sincerely,

Linda Green, M.D.  
Secretary  
Metropolitan Washington Public Health Association

RECEIVED  
2004 JAN 23 AM 8:00  
COUNCILMEMBER  
SCHWARTZ

## **Exhibit 13**



Transportation  
Security  
Administration

APR 6 2004

Mr. Rick Hind  
Legislative Director  
Greenpeace  
702 H Street, NW  
Washington, DC 20001

Dear Mr. Hind:

Thank you for your letter of January 23, 2004, concerning the immediate ban on the shipment of hazardous materials through the Nation's capital.

The Transportation Security Administration (TSA) recognizes the seriousness of this threat. I want to assure you that reducing such dangers to heavily populated areas is one of our priority security focuses. The Department of Homeland Security (DHS) has designated TSA as the lead agency to provide a unified Federal response to this issue.

A working group has been established to explore and determine solutions in securing the District of Columbia rail corridor. The working group is comprised of representatives from DHS, including TSA and the Information Analysis and Infrastructure Protection directorate, as well as the Department of Transportation's Research and Special Programs Administration and Federal Railroad Administration, and the District government. The working group will take a risk-based approach to secure the supply chain along the D.C. rail corridor.

Upon closure of this project, a written report will be drafted outlining the facts and findings of the security review. The report will serve as the baseline for shaping national policies in the transport of hazardous materials for other high rail traffic areas.

I hope you find this information helpful. If you need further information or assistance, please call Mr. James Dunn, TSA Rail Cargo Branch Chief, at (571) 227-1246.

Sincerely yours,

A handwritten signature in black ink, appearing to read "David M. Stone".

David M. Stone  
Acting Administrator

## **Exhibit 14**



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## Train Derailment Fact Sheet

**"Public Health Consequences from Hazardous Substances Acutely Released During Rail Transit --- South Carolina, 2005; Selected States, 1999—2004" \***

In 1990, the Agency for Toxic Substances and Disease Registry (ATSDR) established the [Hazardous Substances Emergency Events Surveillance \(HSEES\) system](#) [<http://www.bt.cdc.gov/surveillance/hsees.asp>] to collect and analyze information about 1) sudden uncontrolled or illegal releases of hazardous substances that require cleanup or neutralization according to federal, state, or local law and 2) threatened releases that result in public health action, such as evacuation. During 1999-2004, 16 states participated in the surveillance system.

### **Facts about releases of hazardous substances during rail transport**

- According to the U.S. Department of Transportation, about 4,300 shipments of hazardous materials travel each day by rail; most of these materials safely reach their destinations.
- These hazardous materials include chemicals and related products and petroleum products, many of which are corrosive, explosive, flammable, or toxic. They can be extremely dangerous when improperly released.
- These materials often travel over, through, and under densely populated areas or near areas with hospitals, schools, or nursing homes, where a sudden release (such as in a derailment) could cause environmental damage, severe injury, or death.
- 1,165 (9%) of the 12,845 transportation-related events recorded in HSEES during 1999-2004 were railroad related.
- Sulfuric acid (7%), sodium hydroxide (6%), and hydrochloric acid (5%) were the substances most frequently released in railroad events.
- Most railroad events occurred in industrial areas (47%) and commercial

areas (27%).

- A primary cause was found for 91% of the railroad events: of those 61% resulted from equipment failure and 24% resulted from human error.

### **Facts about public health impacts of releases of hazardous substances during rail transport include**

- 46 (4%) of the rail events recorded in HSEES resulted in injuries to 271 persons, including 4 deaths.
- The persons most frequently injured were members of the general public (e.g., nearby residents) (55%) and employees (e.g., of railroads) (28%).
- The most frequently reported injuries were respiratory irritation (40%), headache (11%), and eye irritation (10%).
- At least 11,497 people (range: 2-2,500; median: 50) were known to have evacuated; evacuations lasted from less than 1 hour to 13 days (median: 4 hours).

### **Measures that government, employers, and first responders can implement to reduce morbidity and mortality from transit-associated hazardous-substance releases**

- Route hazardous materials away from densely populated areas, where feasible.
- Use HSEES data or other federal, state, and local databases to determine where most releases occur.
- Develop emergency response plans before hazardous-substance events occur, including a community-based public education campaign detailing proper evacuation (<http://www.bt.cdc.gov/planning/evacuationfacts.asp>), shelter-in-place plans (<http://www.bt.cdc.gov/planning/shelteringfacts.asp>), and decontamination procedures (<http://www.bt.cdc.gov/planning/personalcleaningfacts.asp>).
- Deploy public warning systems (e.g., sirens), practice drills, and public shelters.
- Ensure that employees who work with or around hazardous substances undergo continuous job safety training (e.g., hazardous materials training) and have access to appropriate personal protective equipment.
- Ensure that emergency medical service and hospital emergency department staffs have the necessary guidance to plan for, and improve their ability to respond to, incidents that involve human exposure to hazardous materials (<http://www.atsdr.cdc.gov/mhmi.html>).
- Emphasize the importance of preventive maintenance of equipment and vehicles used in transport.

Safety tips for people returning home after a release of hazardous substances  
[http://www.scdhec.net/news/releases/pdf\\_files/nrGranitevilleReturn.pdf](http://www.scdhec.net/news/releases/pdf_files/nrGranitevilleReturn.pdf)

*\*Information for 2004 is preliminary.*

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*This page updated January 28, 2005*

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*Weekly*

January 28, 2005 / 54(03);64-67

# Public Health Consequences from Hazardous Substances Acutely Released During Rail Transit --- South Carolina, 2005; Selected States, 1999--2004

On January 6, 2005, two freight trains collided in Graniteville, South Carolina (approximately 10 miles northeast of Augusta, Georgia), releasing an estimated 11,500 gallons of chlorine gas, which caused nine deaths and sent at least 529 persons seeking medical treatment for possible chlorine exposure (1,2; South Carolina Department of Health and Environmental Control [SCDHEC], unpublished data, 2005). The incident prompted the Agency for Toxic Substances and Disease Registry (ATSDR) to review data from its Hazardous Substances Emergency Events Surveillance (HSEES) system and update an analysis of 1993--1998 railroad events (3). The HSEES system is used to collect and analyze data concerning the public health consequences (e.g., morbidity, mortality, and evacuations) associated with hazardous-substance--release events\* that occur in facilities or during transportation. This report describes the event in South Carolina, which is not part of the HSEES system, and two others from HSEES, and summarizes all rail events reported to HSEES from 16 state health departments† during 1999--2004§. Local government agencies, employers, and first responders can help reduce morbidity and mortality from transit-associated hazardous-substance releases by examining historical spill data for planning purposes, developing emergency response plans, undergoing proper hazardous materials (HazMat) training, and reviewing epidemiologic investigation data.

## Case Reports

**South Carolina.** At approximately 2:40 a.m. on January 6, in Graniteville, South Carolina, a freight train with three chlorine tanker cars and one sodium hydroxide tanker car collided with a train parked on an industrial rail spur. The collision caused a breach in one chlorine car, which resulted in the immediate release of an estimated 11,500 gallons of chlorine gas. As a result, nine persons died, and at least 529 persons sought medical care. Because exposure to high levels of chlorine can result in corrosive damage to the eyes, skin, and respiratory tissues and lead to pulmonary edema and, in extreme cases, death (5), local emergency management officials initially issued a shelter-in-place order for a 1-mile radius around the site until 4:30 p.m. At noon, South Carolina declared a state of emergency, giving local authorities responsibility for issuing a mandatory evacuation for the 5,453 residents within the 1-mile radius. Area schools and businesses were closed. Four days later, an operation to patch the leaking chlorine tank car succeeded by applying a temporary repair (2). Federal responders from ATSDR, the U.S. Environmental Protection Agency (EPA), and the U.S.

Coast Guard arrived to assist SCDHEC in sampling air in factories, homes, and schools within the 1-mile radius.

A rapid epidemiologic assessment determined that, of the 511 persons examined in emergency departments after exposure to chlorine gas, 69 were hospitalized in seven area hospitals. An additional 18 persons were treated at area physician offices. An ongoing assessment is examining the public health impact associated with exposure to chlorine gas. Those exposed are being interviewed about their symptoms, the location and duration of the exposures, and demographic information necessary for monitoring any long-term health effects and psychosocial consequences.

**Texas.** In June 2004, a moving train struck a stationary train at a rail substation, causing a derailment. One tanker car was punctured, releasing approximately 90,000 pounds of chlorine gas. At least 60,000 pounds of chlorine reacted with sodium hydroxide to form sodium hypochlorite. Also released were approximately 78,000 gallons of urea fertilizer and 7,000 gallons of diesel fuel. Forty-four persons were injured, including three who died. The train conductor died from trauma sustained during impact, and two elderly residents near the site died from chlorine inhalation. Of the remaining 41 injured, 22 were members of the general public, 13 were employees, and six were first responders. The most frequent injuries were respiratory and eye irritation. The majority of those injured (22 [54%]) were treated at a hospital and released, 12 (29%) were treated on the scene, and seven (17%) were treated at a hospital and admitted. Nearby residents initially were ordered to shelter-in-place while a site assessment was conducted. Later, evacuation of 45 residents for 13 days was ordered when the company prepared to unload the chlorine car. Responding to the event were a certified HazMat team; railroad response team; EPA response team; teams from the National Transportation Safety Board and Federal Railroad Administration; and local health, environmental, fire, law enforcement, and emergency medical services (EMS) personnel. Twenty railroad employees and 80 first responders were decontaminated after responding to the event. The cause of the derailment was determined to be human error (i.e., failure to stop).

**Missouri.** In August 2002, approximately 16,900 pounds of chlorine gas were released from a railroad tanker car when a flex hose ruptured during unloading at a chemical plant. An automatic shut-off valve on the car and an emergency shut-off system at the plant failed to work as back-up prevention measures. Sixty-seven persons were injured: 61 members of the general public and six employees. The most common injury was respiratory irritation. Sixty-five (97%) of the injured were treated at a hospital and released; two (3%) were admitted. Approximately 400 nearby residents were evacuated for 7.5 hours; the release was stopped and contained through the efforts of a certified HazMat team; company response team; EPA response team; and law enforcement, fire, EMS, and local environmental personnel.

## **HSEES Data**

Of the 49,450 events reported to HSEES during 1999--2004, a total of 12,845 (30%) were transportation related; of these, 1,165 (9%) were rail events. Fifteen of the 16 HSEES states reported rail events, with Texas (249 [21%] events) and Louisiana (175 [15%]) reporting the most. Rail events occurred most frequently in industrial (47%) and commercial areas (27%). A total of 1,080 (93%) events involved the release of only one chemical. Of the 1,299 total substances released, the most common were sulfuric acid (73 [6%] releases), sodium hydroxide (60 [5%]), and hydrochloric acid (53 [4%]) (Table). Chlorine gas, the substance released in all three case reports, accounted for 11 (0.8%) of the releases reported to HSEES in rail events.

Approximately 60% of the known quantities released were measured in gallons. Of these, quantities ranged from <1 gallon to 400,000 gallons (median: 7.5 gallons). Of the 1,055 (91%) railroad events

for which a primary cause was identified, 645 (61%) resulted from equipment failure and 258 (24%) from human error.

Forty-six (4%) of the 1,165 identified rail events resulted in injuries to 271 persons, including four deaths. The persons most frequently injured were members of the general public (e.g., nearby residents) (150 [55%]) and employees (e.g., of railroads and plants) (77 [28%]). Of the 370 total injuries sustained by the 271 persons, the most frequently reported were respiratory irritation (147 [40%]), headache (40 [11%]), and eye irritation (36 [10%]). Of the 271 injured, 205 (76%) were treated at hospitals and released, 29 (11%) were treated on the scene, 15 (6%) were treated at hospitals and admitted, and four (1%) died.

Of the 938 (81%) railroad events for which population data were available, 185,801 persons lived within one-quarter mile of the release (range: 0--3,000 persons; median: 38 persons). Seventy-five (6%) railroad events involved ordered evacuations, of which 61 had a known number of evacuees. A total of 11,497 persons (range: 2--2,500 persons; median: 50 persons) were known to have evacuated. Durations of evacuation ranged from <1 hour to 13 days (median: 4 hours).

**Reported by:** *C Henry, Missouri Dept of Health and Senior Svcs. A Belflower, MSPH, D Drociuk, MSPH, JJ Gibson, MD, Div of Acute Disease Epidemiology, South Carolina Dept of Health and Environmental Control. R Harris, Texas Dept of Health. DK Horton, MSPH, S Rossiter, MPH, M Orr, MS, Div of Health Studies; B Safay, T Forrester, Div of Regional Operations; S Wright, Div of Toxicology; Agency for Toxic Substances and Disease Registry. MA Wenck, DVM, EIS Officer, CDC.*

## **Editorial Note:**

Approximately 800,000 shipments of hazardous substances travel daily throughout the United States by ground, rail, air, water, and pipeline; approximately 4,300 shipments of hazardous materials travel each day by rail, including chemical and petroleum products (6). Although nearly all of these materials safely reach their destinations (7), many are explosive, flammable, toxic, and corrosive and can be extremely dangerous when improperly released. These materials frequently are transported over, through, and under areas that are densely populated or populated by schools, hospitals, or nursing homes, where the consequences of an acute release could result in environmental damage, severe injury, or death (8).

Findings from the HSEES system suggest that rail events constitute only 2% of total hazardous-substance releases. Furthermore, most rail events involved small-scale releases (75% of events involved  $\leq 70$  gallons). However, large-scale, acute releases during rail transit can occur (10% of events involved  $\geq 2,200$  gallons) and can cause substantial injury and death, as demonstrated by the case reports.

The findings in this report are subject to at least two limitations. Reporting of any event to HSEES is not mandatory; therefore, participating state health departments might not be informed about every event. Second, only 16 state health departments provided data to HSEES during the analysis period; therefore, the data represent only a proportion of the total hazardous-substance releases in the United States.

Examining data on locations, types, and times of previous hazardous-substance releases is crucial to preventing or planning responses to future releases ([Box](#)). HSEES does not anticipate a new funding announcement until 2008; however, nonparticipating states can use the U.S. Department of Transportation Hazardous Materials Information Reporting System (HMIRS) to acquire data on

railroad and other transportation-related hazardous materials incidents in their area. Although HMIRS does not actively collect detailed public health consequence data, nonparticipating states can request such data from HSEES participant states to increase their knowledge of hazardous-substance releases.

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\* An HSEES event is the acute release or threatened release of a hazardous substance(s) into the environment in an amount that requires (or would have required) removal, cleanup, or neutralization according to federal, state, or local law (4). A hazardous substance is one that can reasonably be expected to cause an adverse health effect.

† Alabama, Colorado, Iowa, Louisiana, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Oregon, Rhode Island, Texas, Utah, Washington, and Wisconsin.

§ Data for 2004 are preliminary.

## Table



**TABLE. Most common hazardous substances released during rail events — Hazardous Substances Emergency Events Surveillance (HSEES) system, 16 states\*, 1999–2004†**

Substance	No. of releases§	(%)
Sulfuric acid	73	(5.6)
Sodium hydroxide	60	(4.6)
Hydrochloric acid	53	(4.1)
Ammonia	51	(3.9)
Methanol	36	(2.8)
Phosphoric acid	30	(2.3)
Mixture¶	27	(2.1)
Argon	22	(1.7)
Ethylene glycol	22	(1.7)
Diesel fuel	19	(1.5)
Ethanol	17	(1.3)
Hydrogen peroxide	16	(1.2)
Potassium hydroxide	15	(1.1)
Alcohol NOS**	11	(0.8)
Ammonium nitrate	11	(0.8)
Chlorine	11	(0.8)
Sodium chlorate	11	(0.8)

\* Alabama, Colorado, Iowa, Louisiana, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Oregon, Rhode Island, Texas, Utah, Washington, and Wisconsin.

† 2004 data are preliminary.

§ A total of 1,299 substances were released during the 1,165 rail events.

¶ Substances mixed before release (e.g., benzene/toluene).

\*\* Not otherwise specified.

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**Box**



**BOX. Measures that government, employers, and first responders can implement to reduce morbidity and mortality from transit-associated hazardous-substance releases**

- Route hazardous materials away from densely populated areas, where feasible.
- Use Hazardous Substances Emergency Events Surveillance data or other federal, state, and local databases to determine where most releases occur.
- Develop emergency response plans before hazardous-substance events occur, including a community-based public education campaign detailing proper evacuation (<http://www.bt.cdc.gov/planning/evacuationfacts.asp>), shelter-in-place plans (<http://www.bt.cdc.gov/planning/shelteringfacts.asp>), and decontamination procedures (<http://www.bt.cdc.gov/planning/personalcleaningfacts.asp>).
- Deploy public warning systems (e.g., sirens), practice drills, and public shelters.
- Ensure that employees who work with or around hazardous substances undergo continuous job safety training (e.g., hazardous materials training) and have access to appropriate personal protective equipment.
- Ensure that emergency medical service and hospital emergency department staffs have the necessary guidance to plan for, and improve their ability to respond to, incidents that involve human exposure to hazardous materials (<http://www.atsdr.cdc.gov/mhmi.html>).
- Emphasize the importance of preventive maintenance of equipment and vehicles used in transport (3,9).

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